

REPLACEMENT SHEETS

Filing Date: September 29, 2000

U.S. Patent Application No. 09/672,793

Title: Method and Arrangement for Inspection and Regualification of...

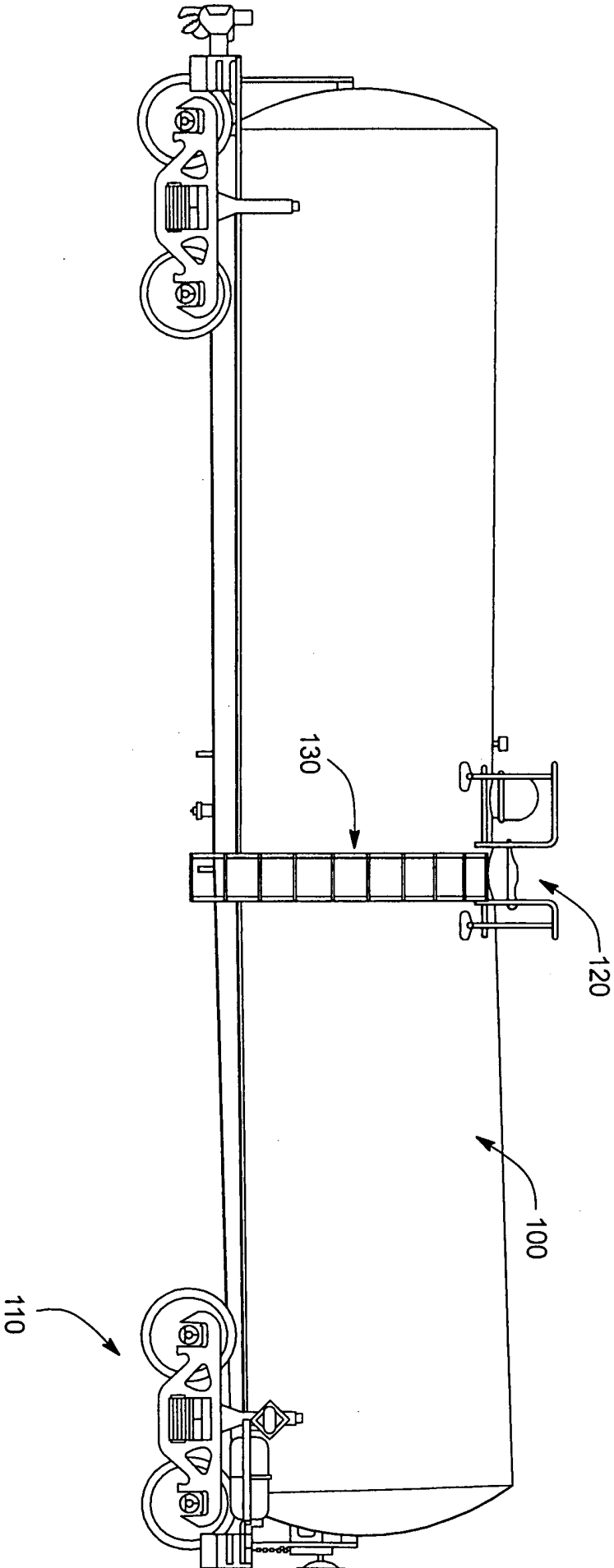
Patent Agent: Stephen T. Scherrer (Reg. No. 45,080)

Tel: 312.372.2000 Fax: 312.984.7700

Docket No. 47440-015 (p.k.a. 47440-027)

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FIG. 1



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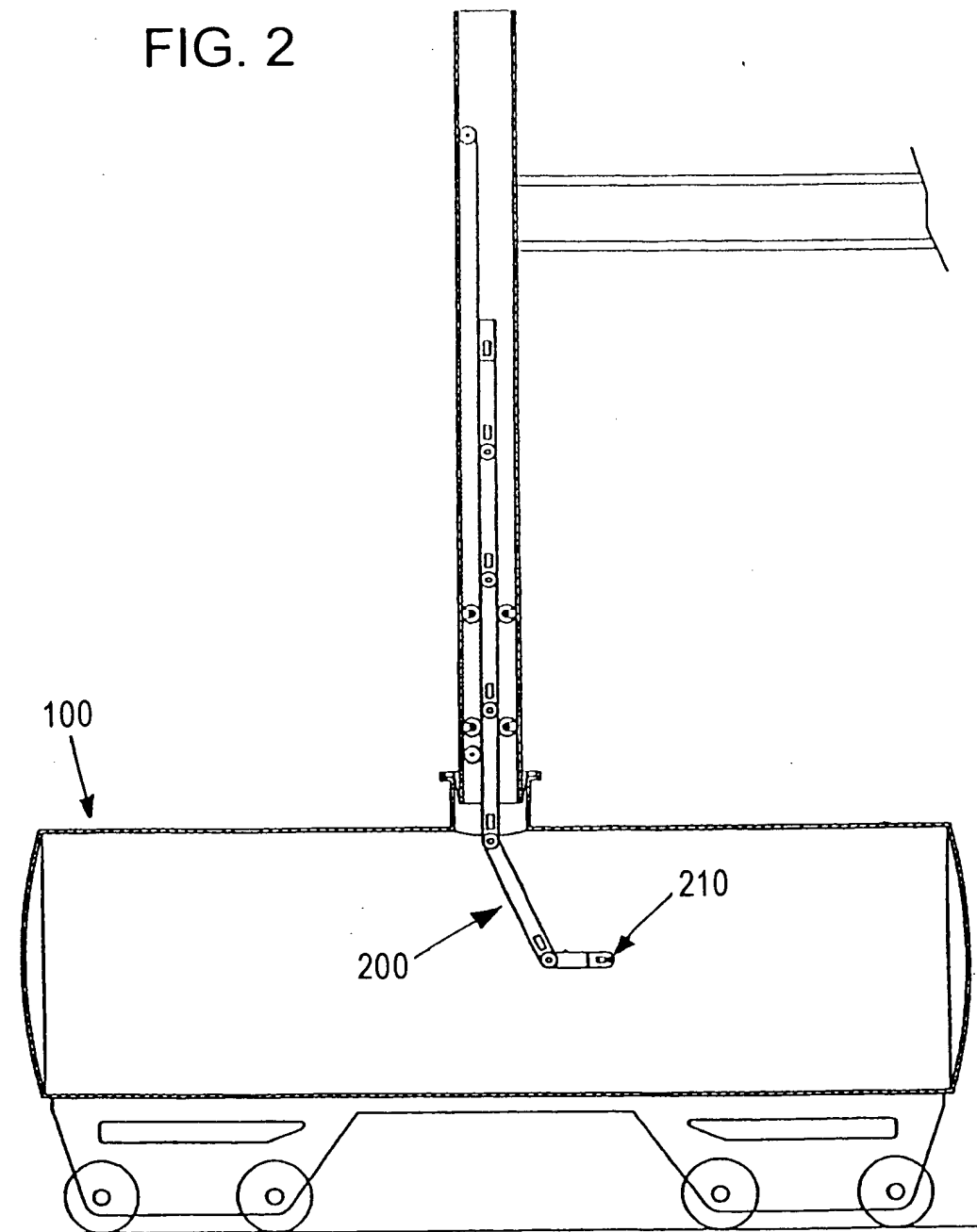
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FIG. 2



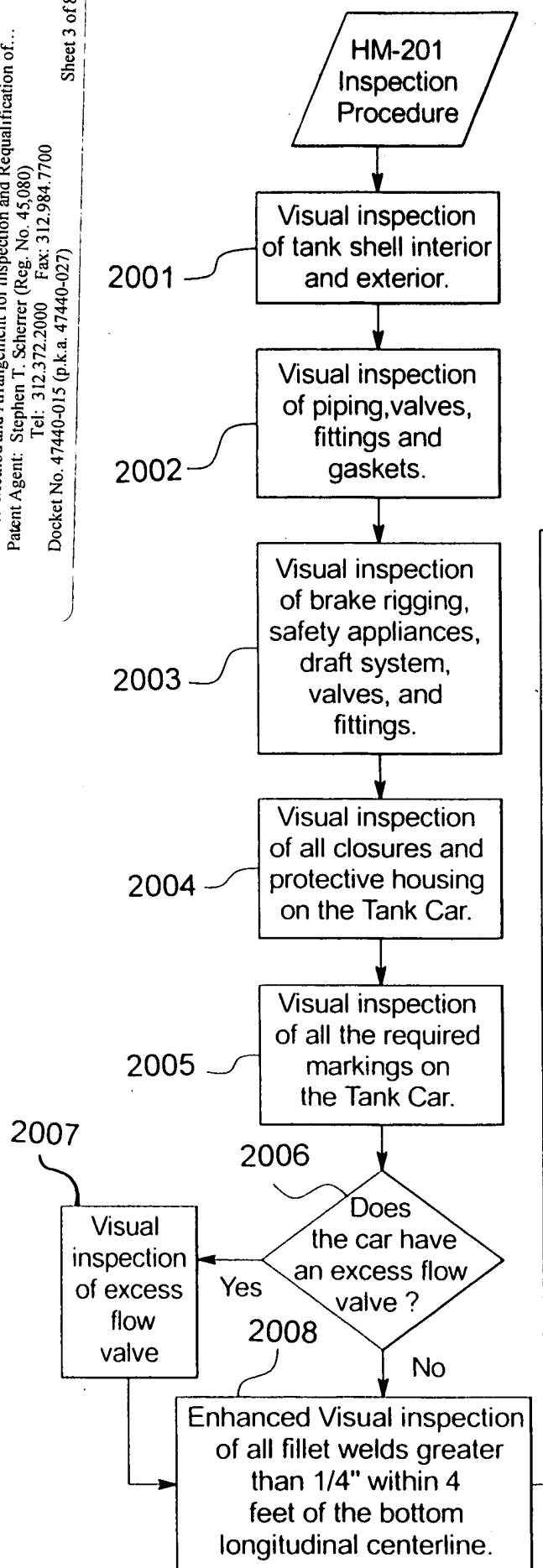


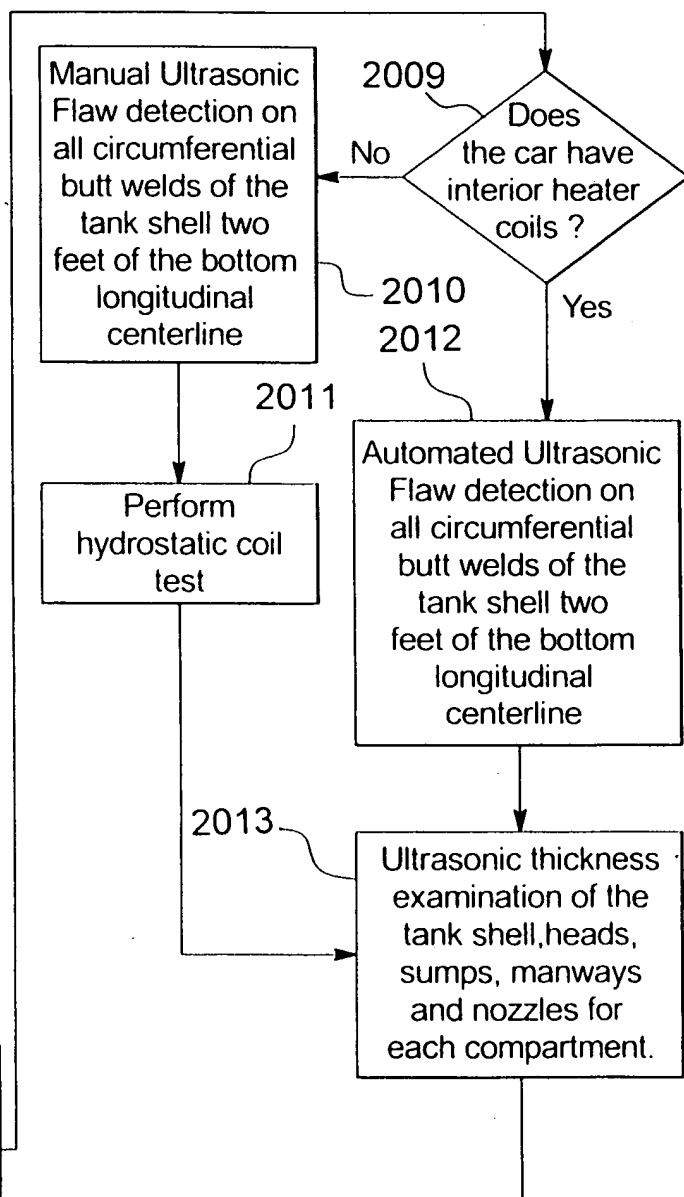
FIG. 3

FIG. 3A

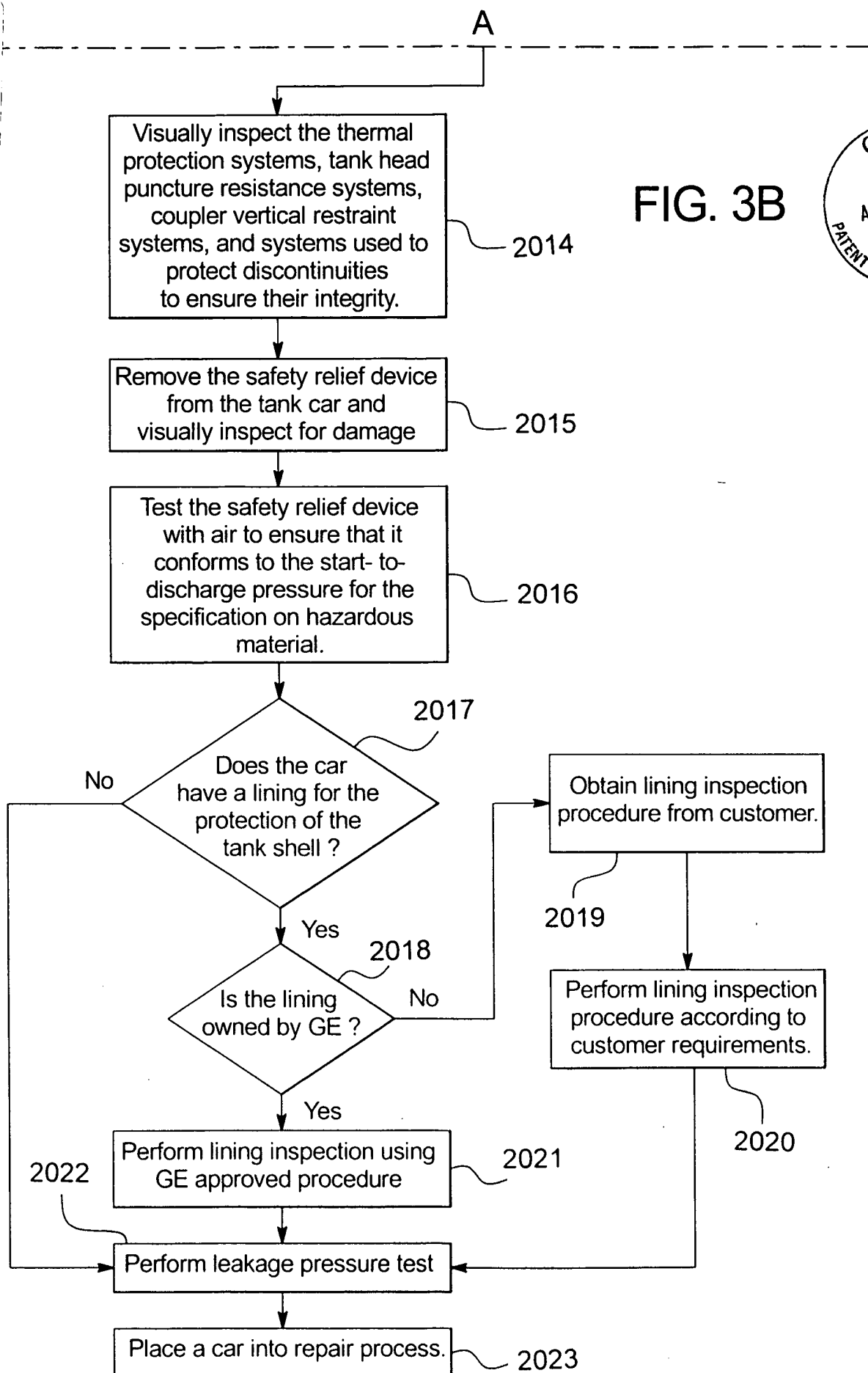
FIG. 3B



FIG. 3A



A



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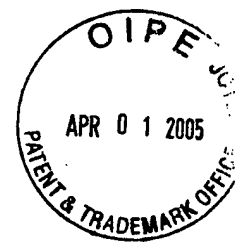


FIG. 4A

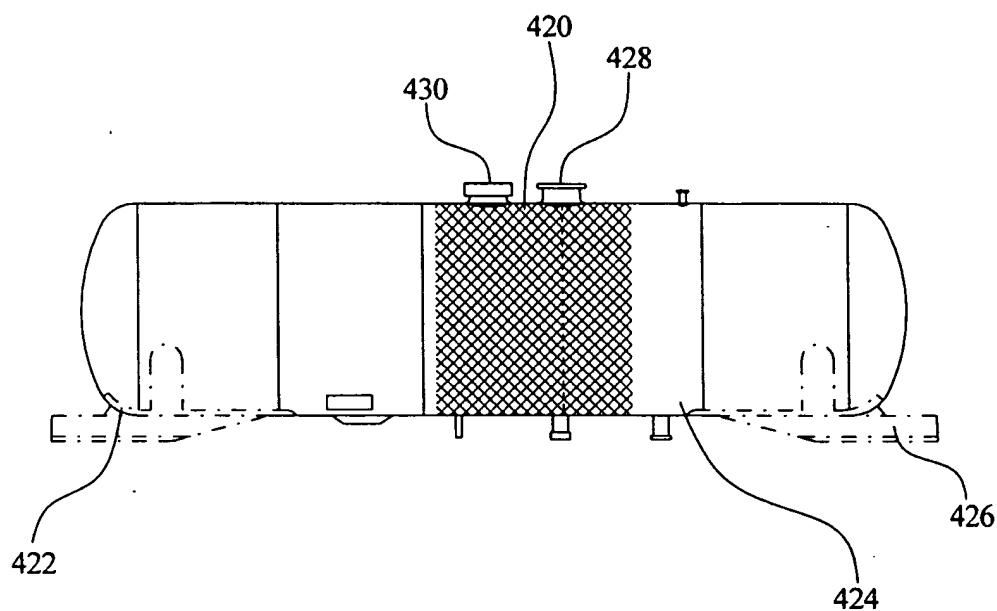
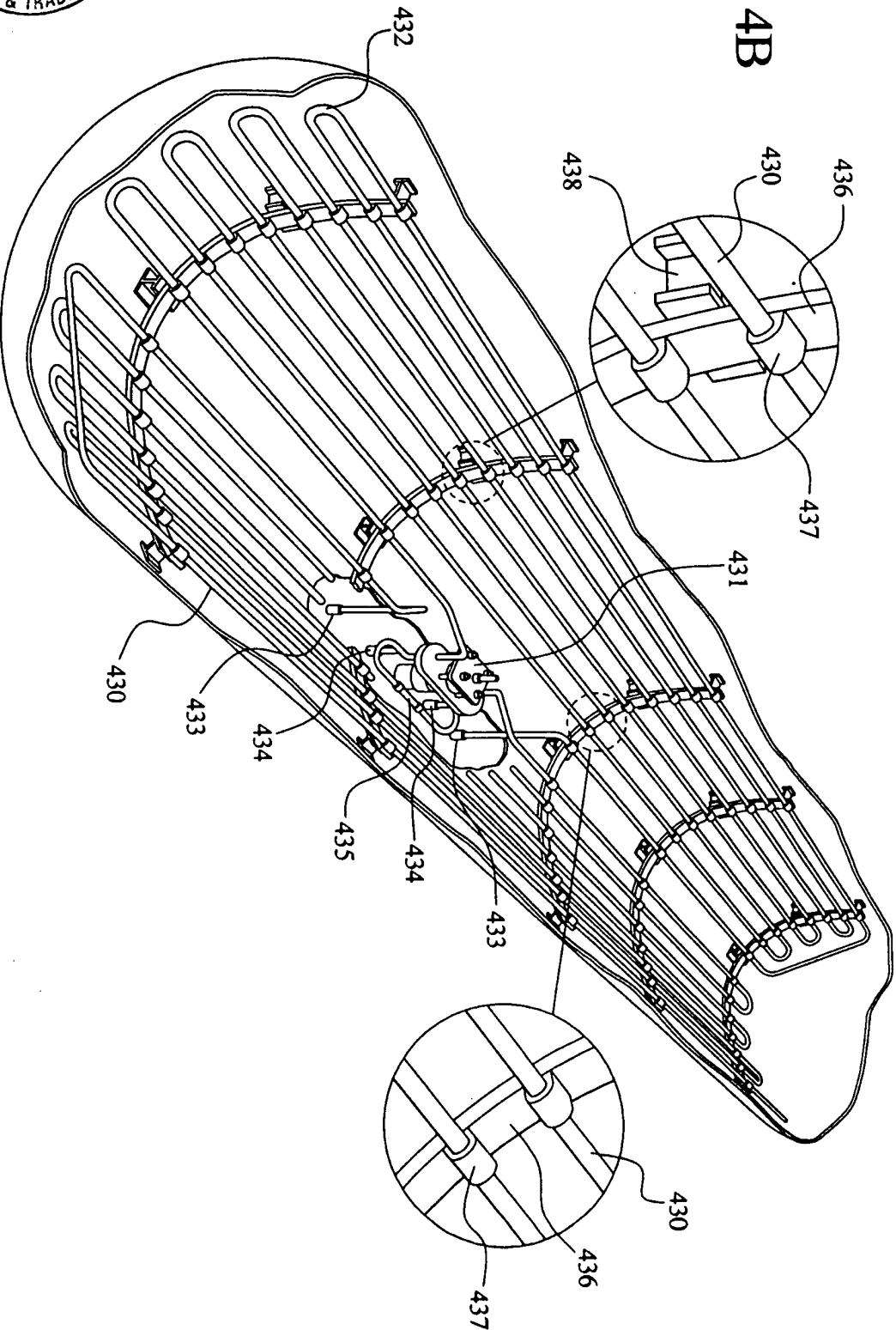


FIG. 4B



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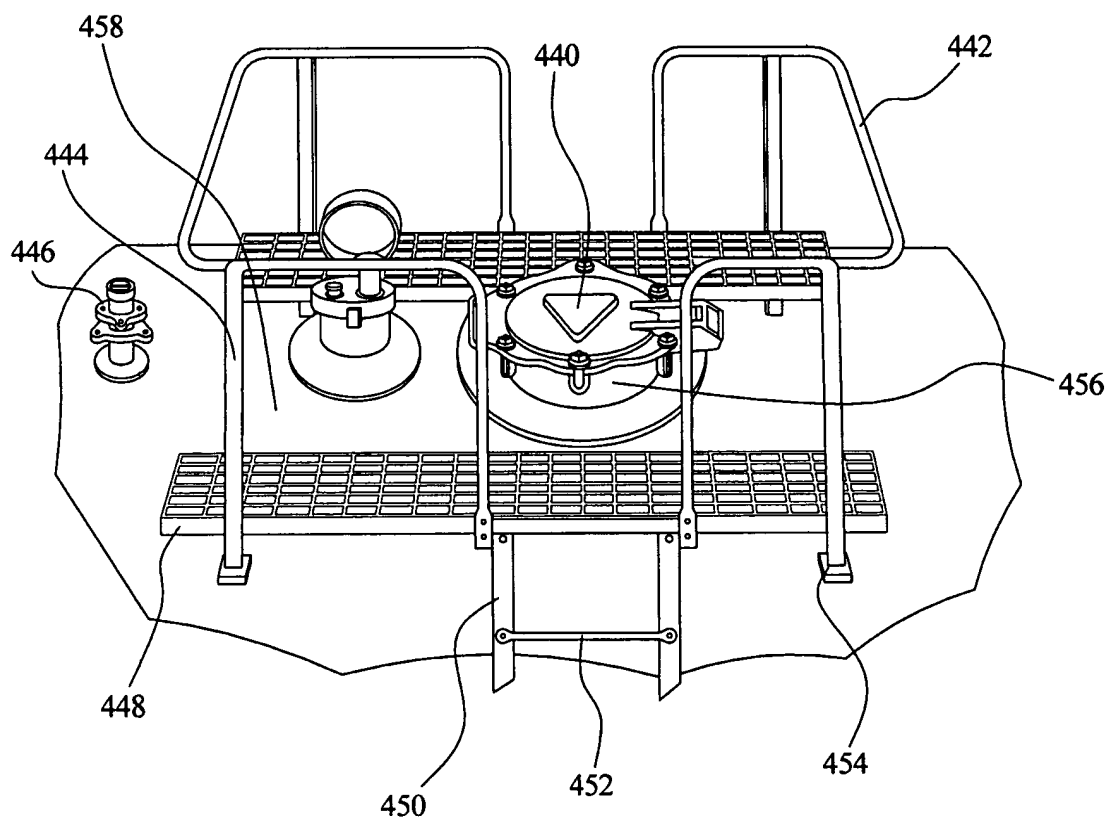
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FIG. 4C



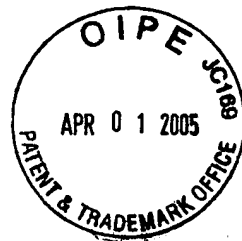


FIG. 4D

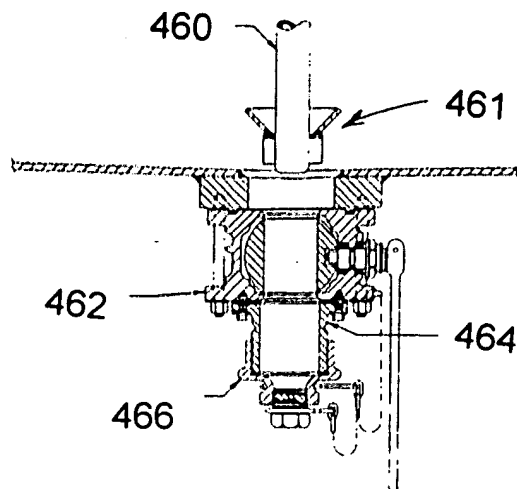


FIG. 4E

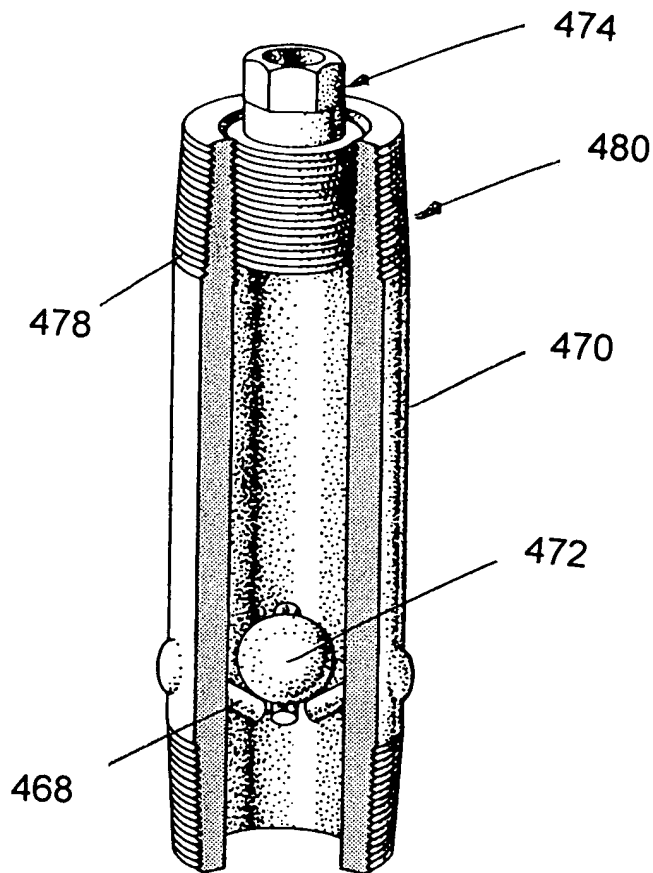


FIG. 5A

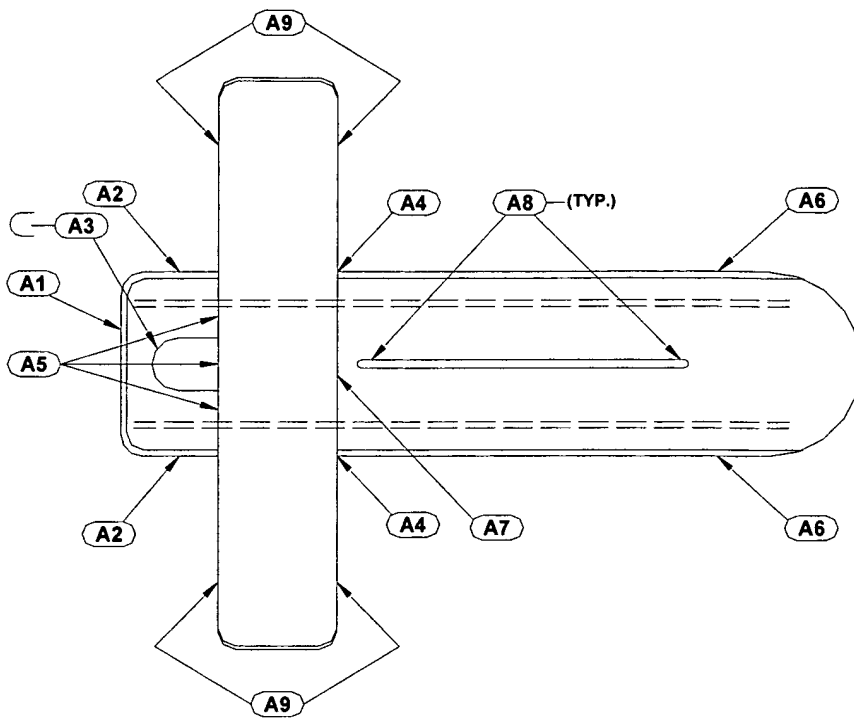
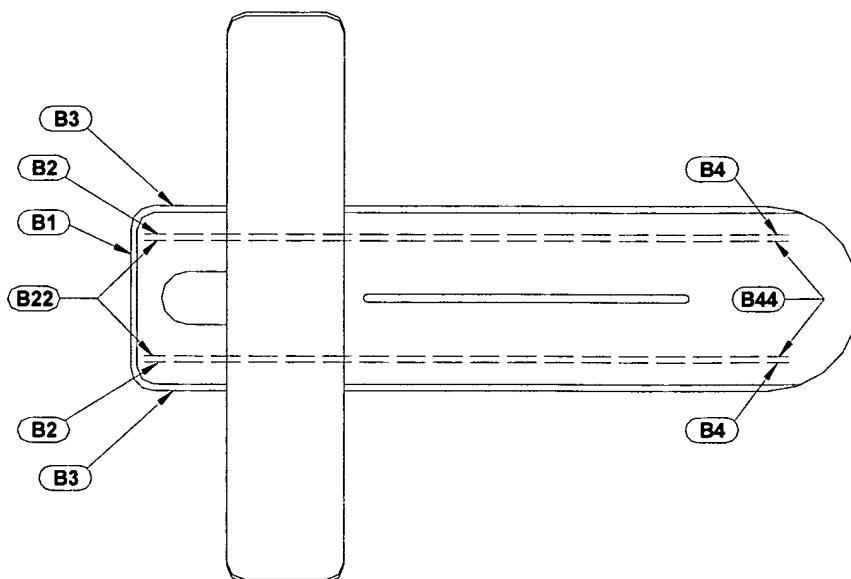
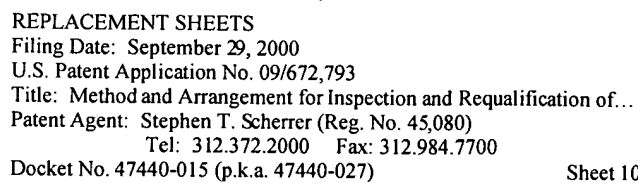


FIG. 5B





41.3 1/4"		STATION STENCIL		QUALIFIED		DUE	
TANK QUALIFICATION							
SERVICE EQUIPMENT							
COATING/LINING							
TYPE				(3a)			
DATE APPLIED				(3b)			
88.B.2 INSPECTION							

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FIG. 5C

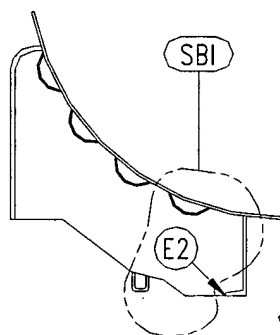
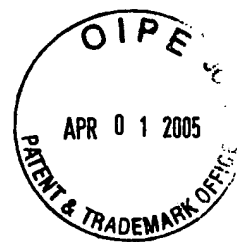


Fig. 1

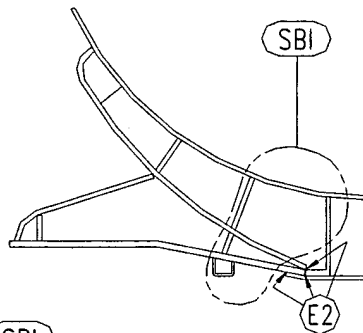


Fig. 2

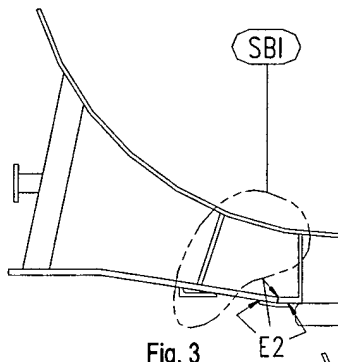


Fig. 3

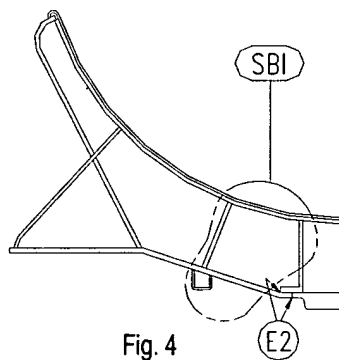


Fig. 4

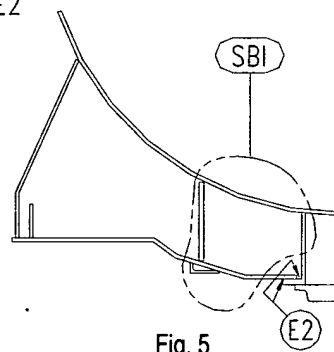


Fig. 5



FIG. 5D

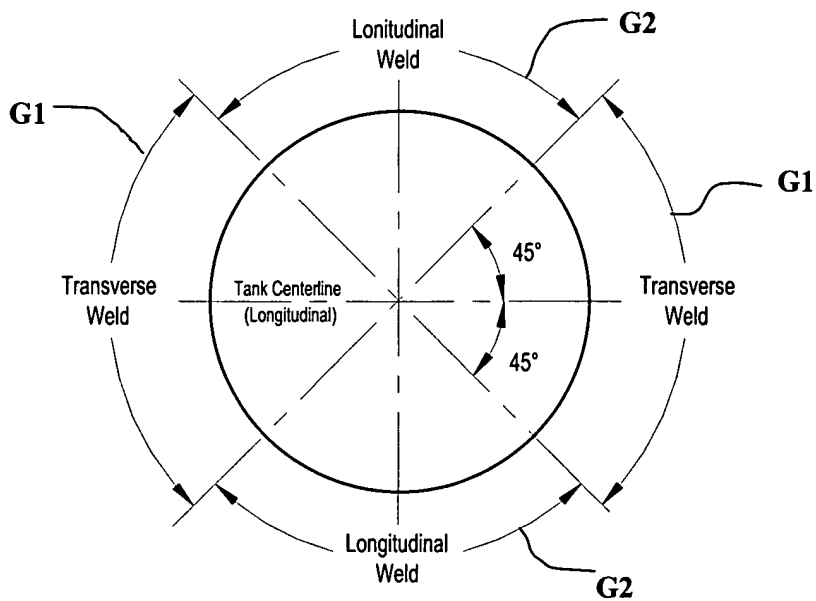


FIG. 5E

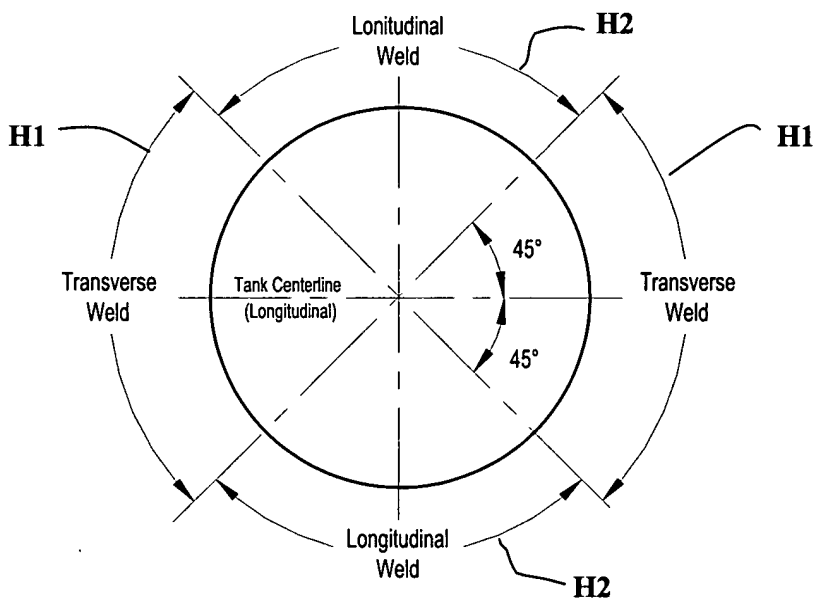




FIG. 5F

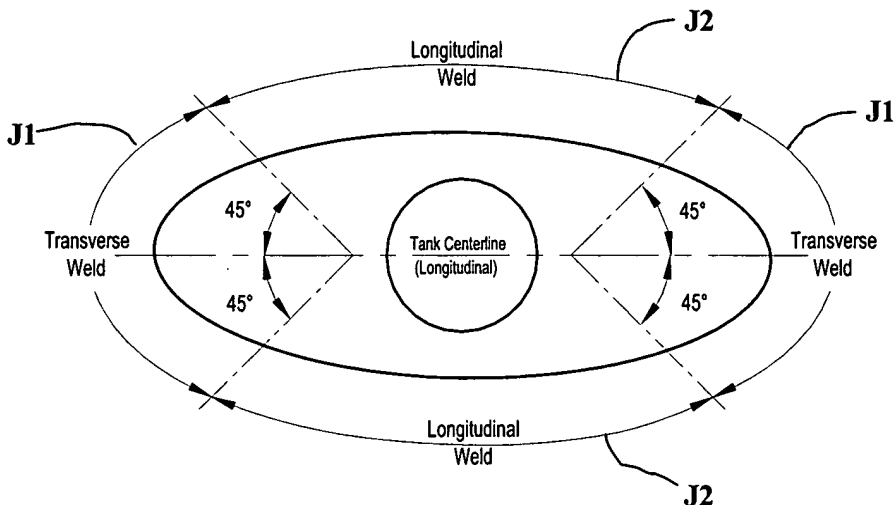
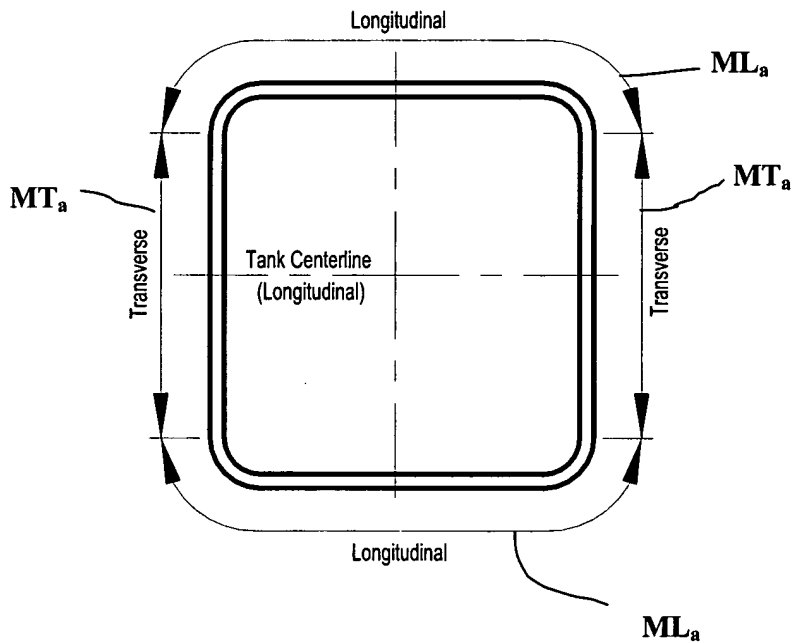


FIG. 5G



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FIG. 5H

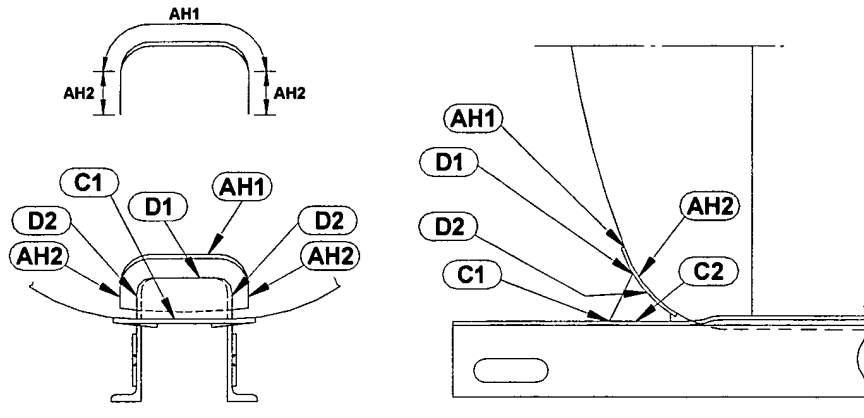
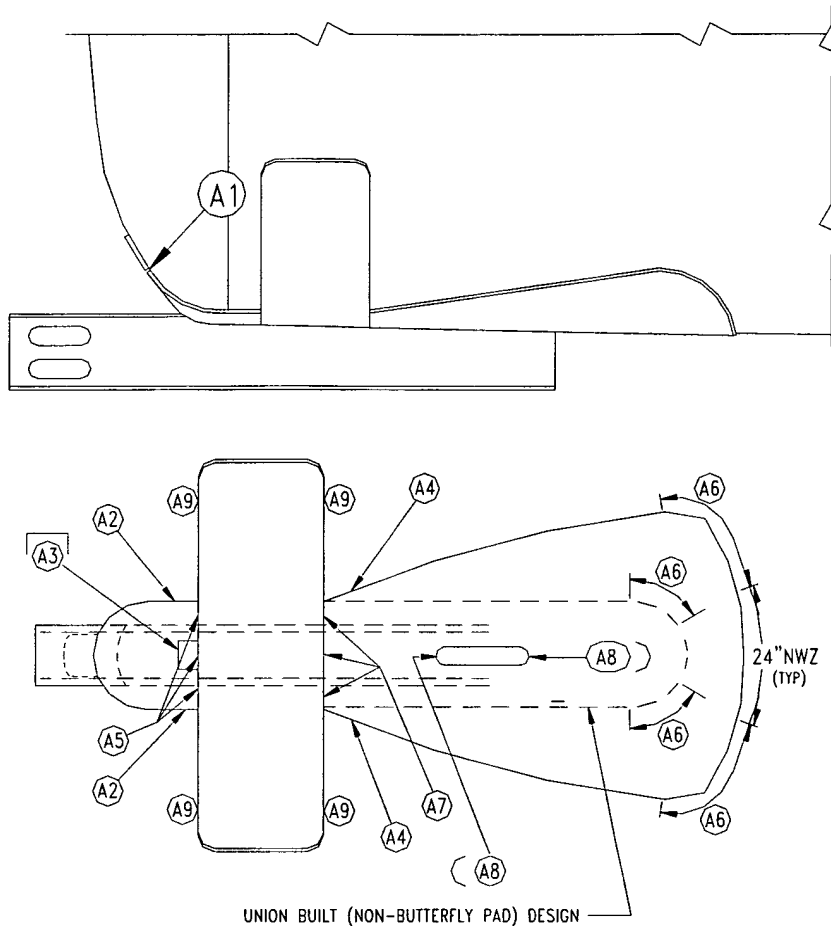




FIG. 6A



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FIG. 6B

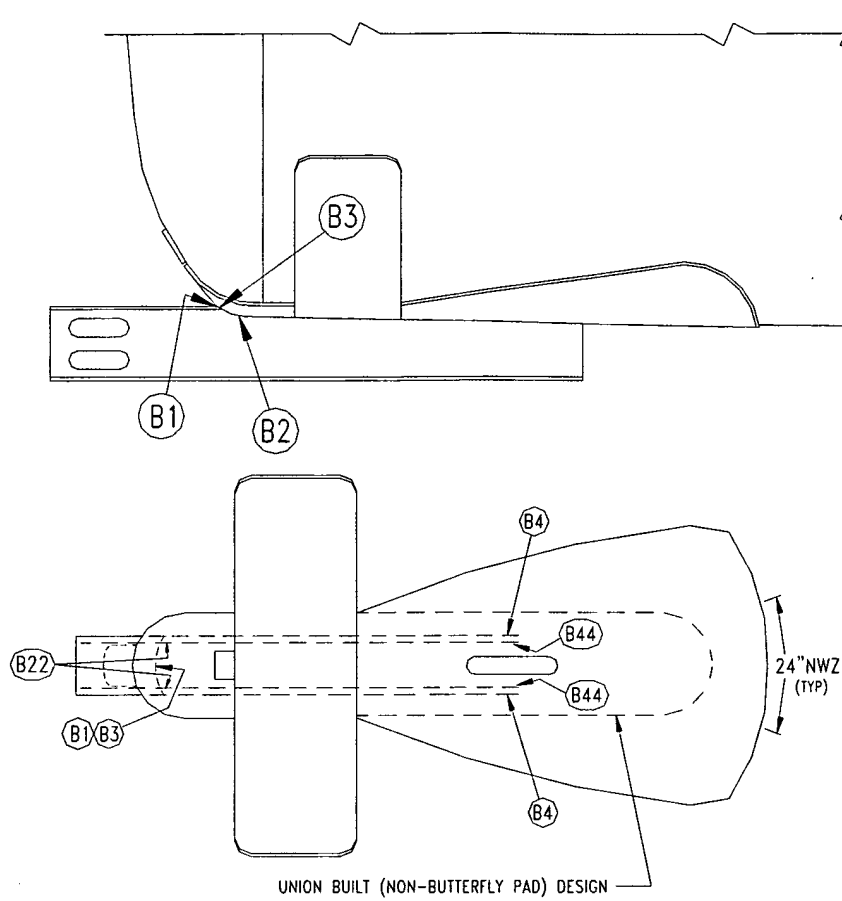


FIG. 6C

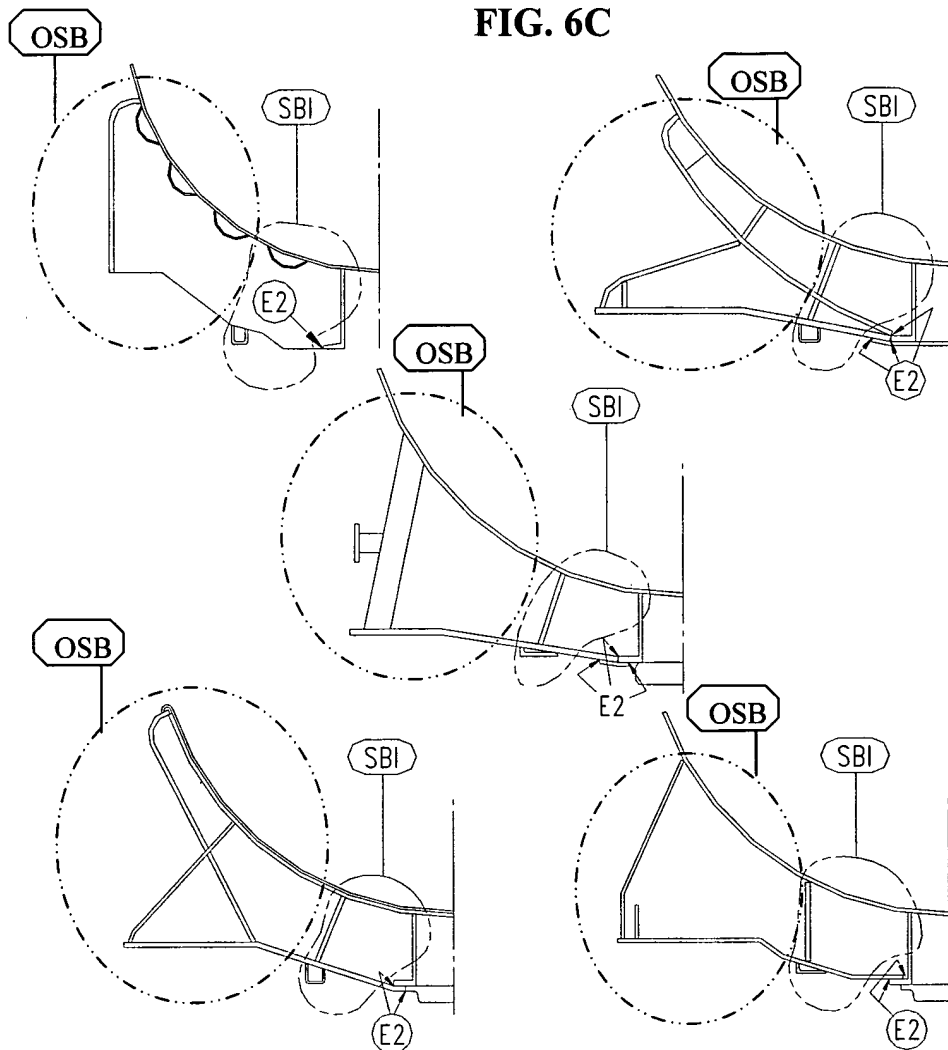




FIG. 6D

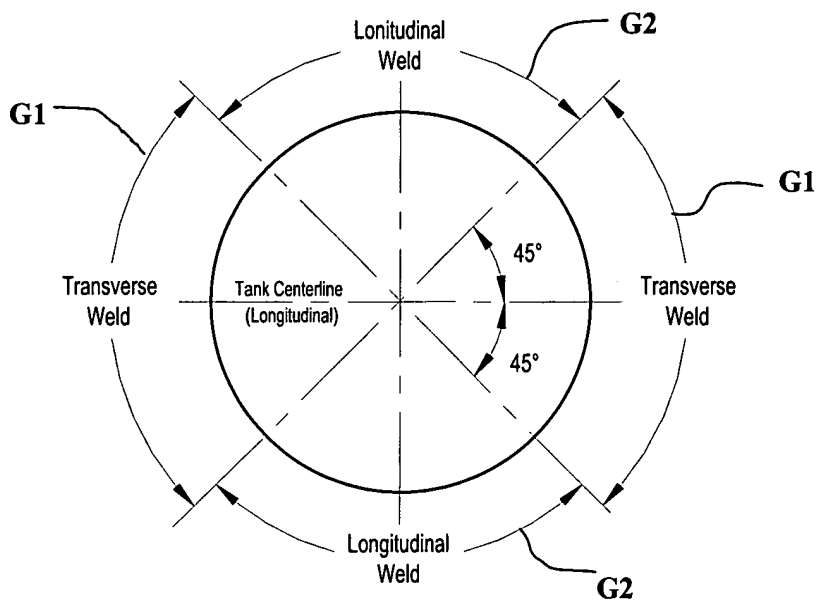


FIG. 6E

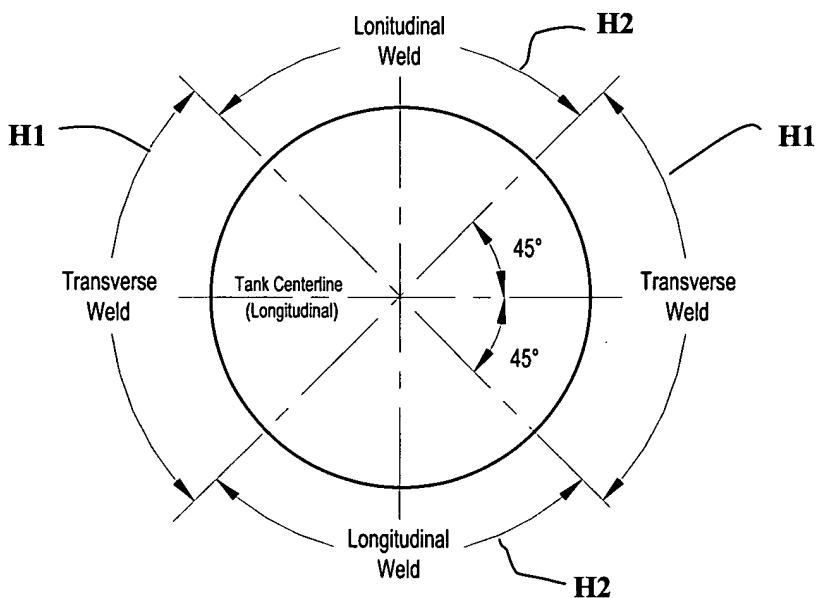




FIG. 6F

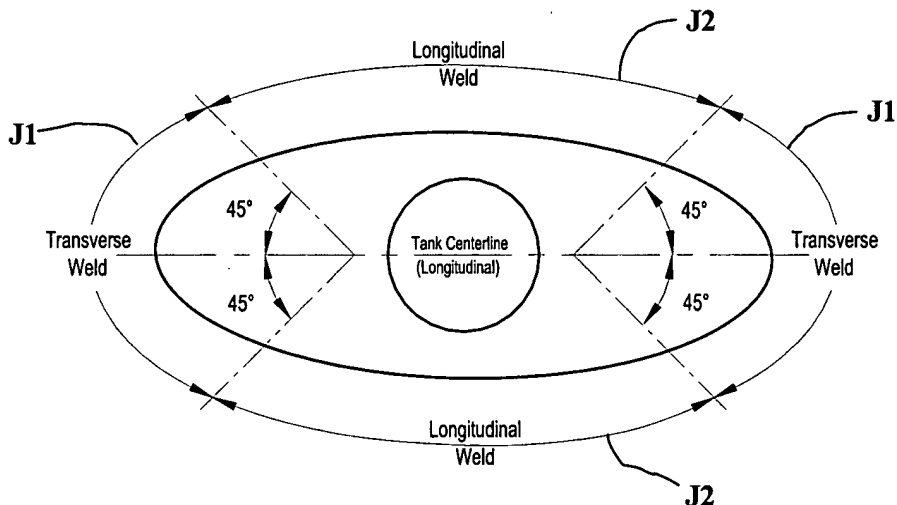
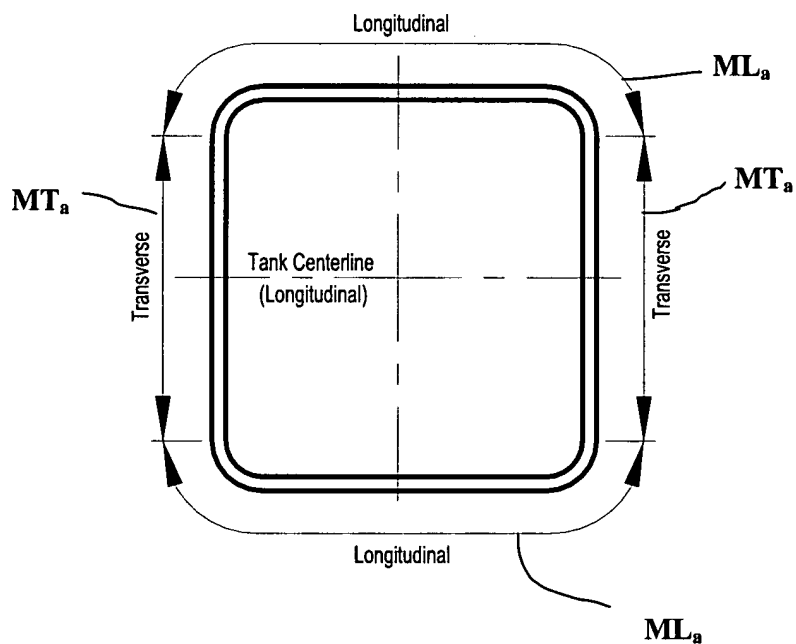


FIG. 6G



REPLACEMENT SHEETS

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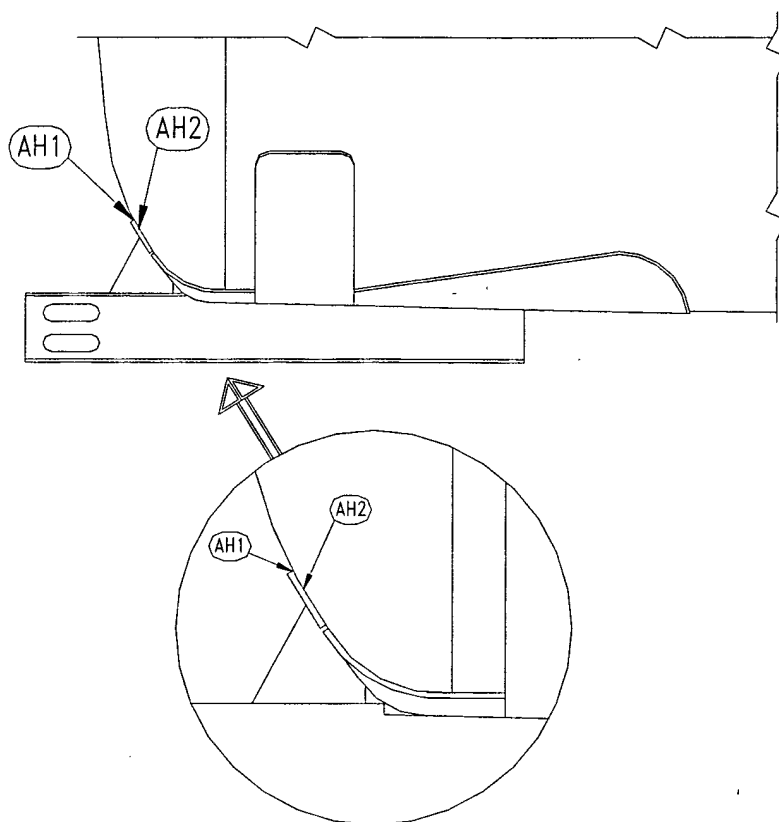
Patent Agent: Stephen T. Scherrer (Reg. No. 45,080)

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FIG. 6H



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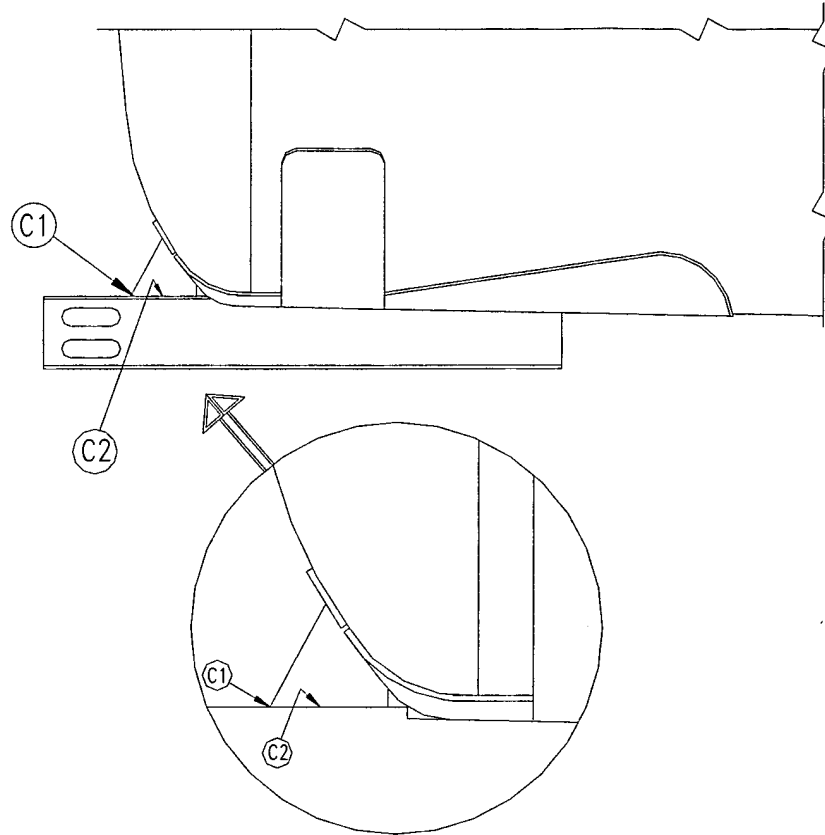
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FIG. 6I



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FIG. 6J

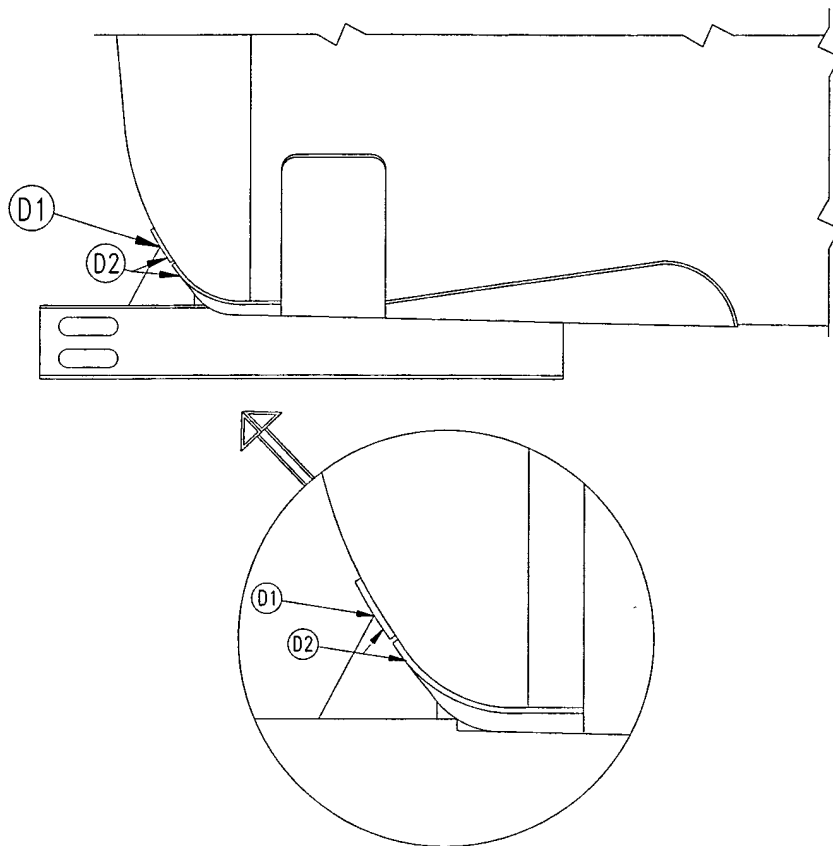


FIG. 7A

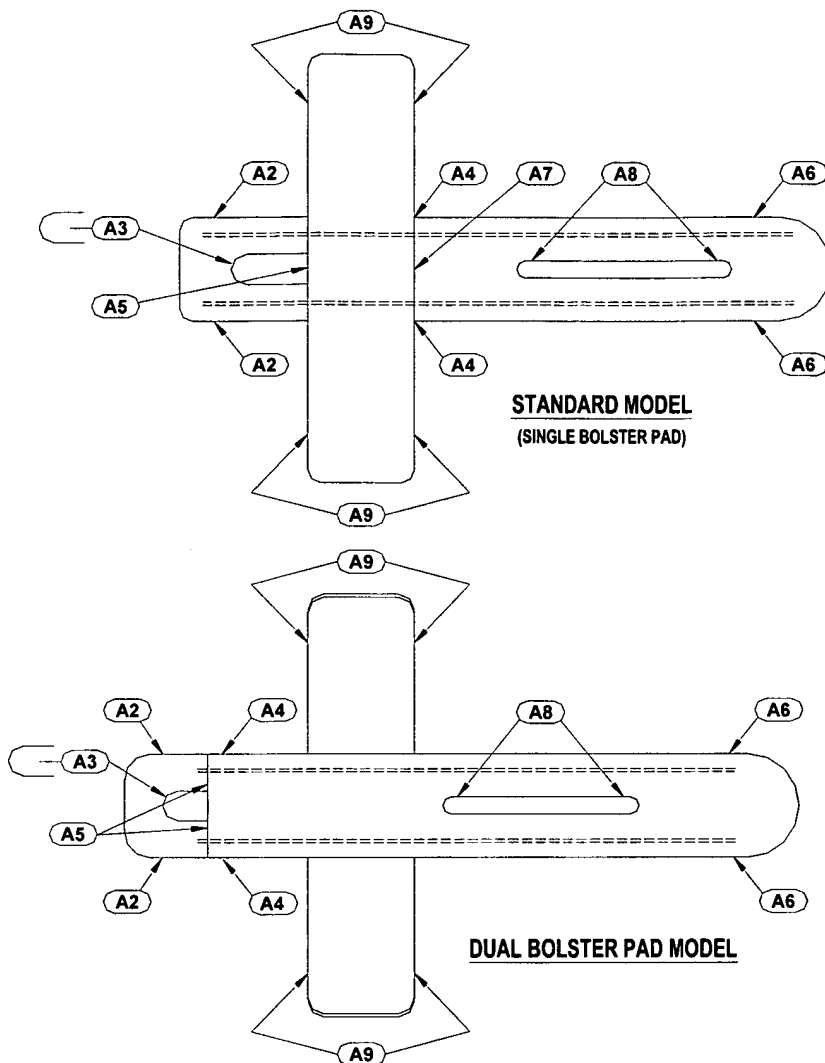


FIG. 7B

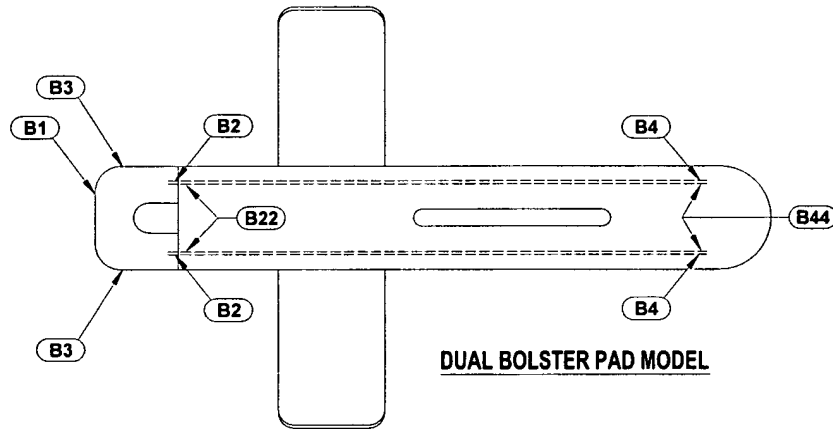
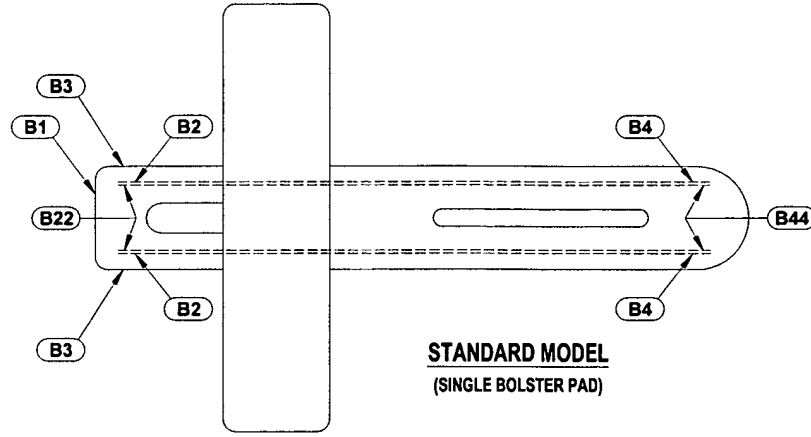


FIG. 7C

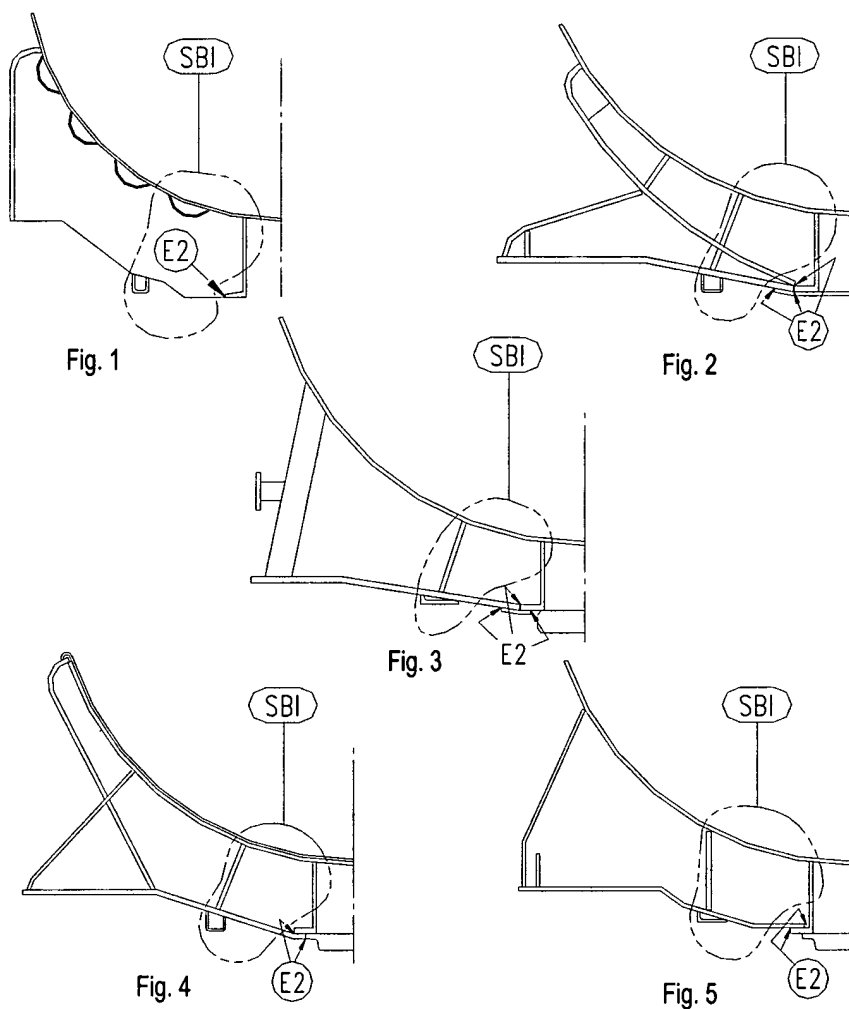


FIG. 7D

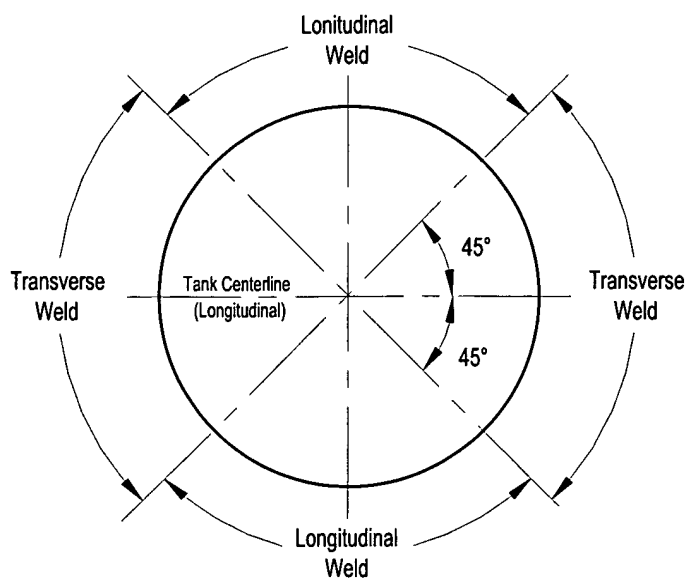


FIG. 7E

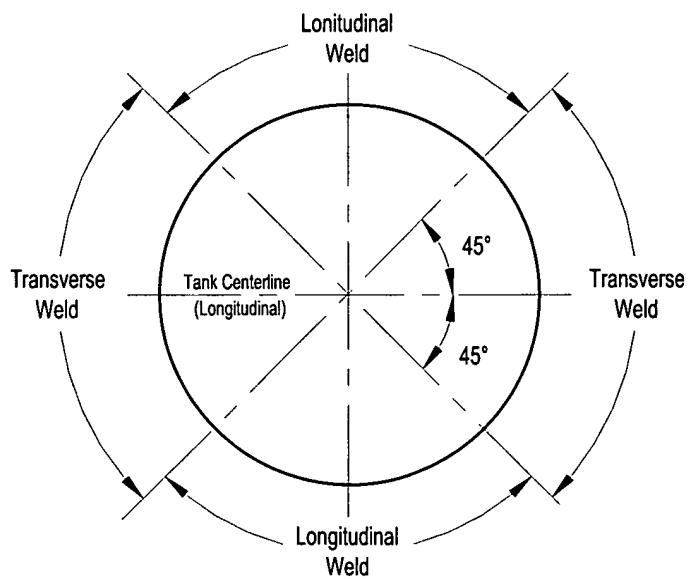




FIG. 7F

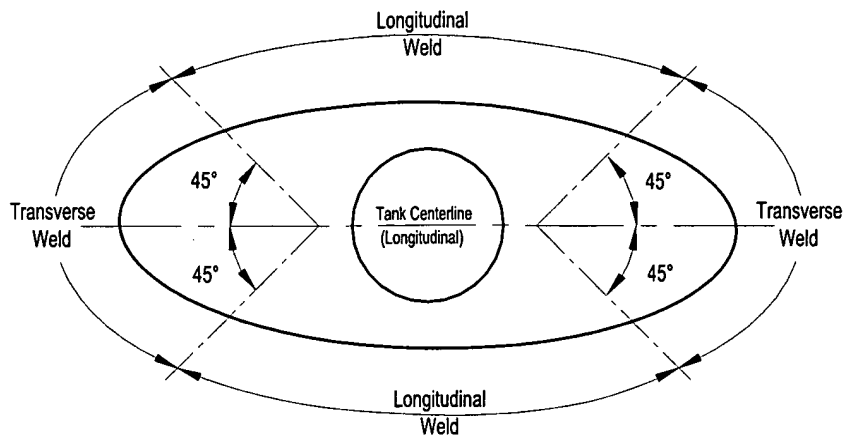


FIG. 7G

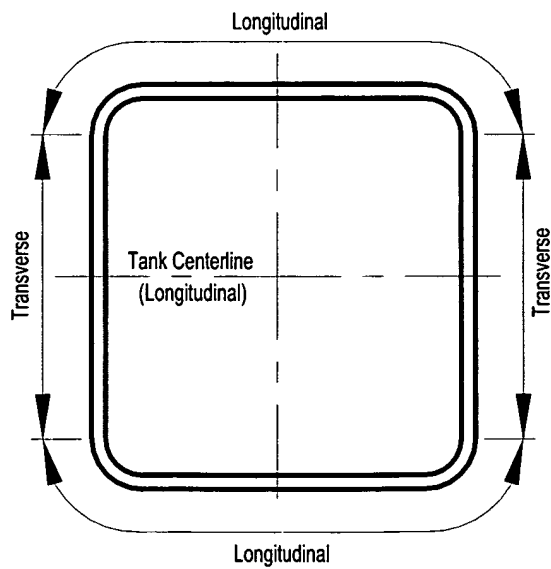


FIG. 7H

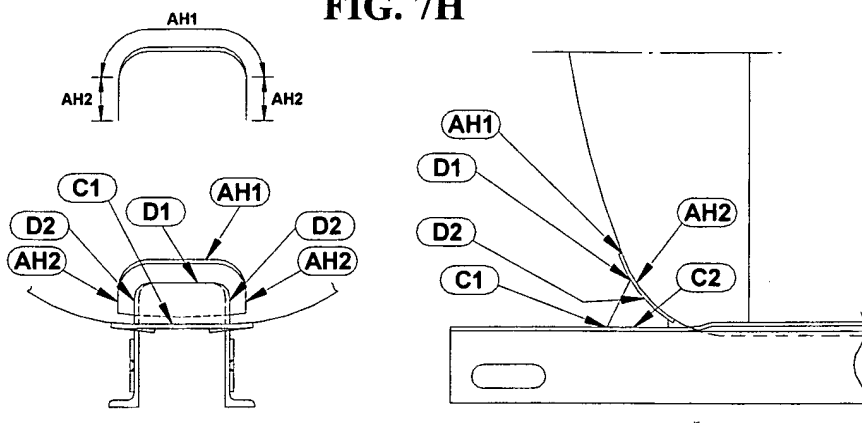




FIG. 8A

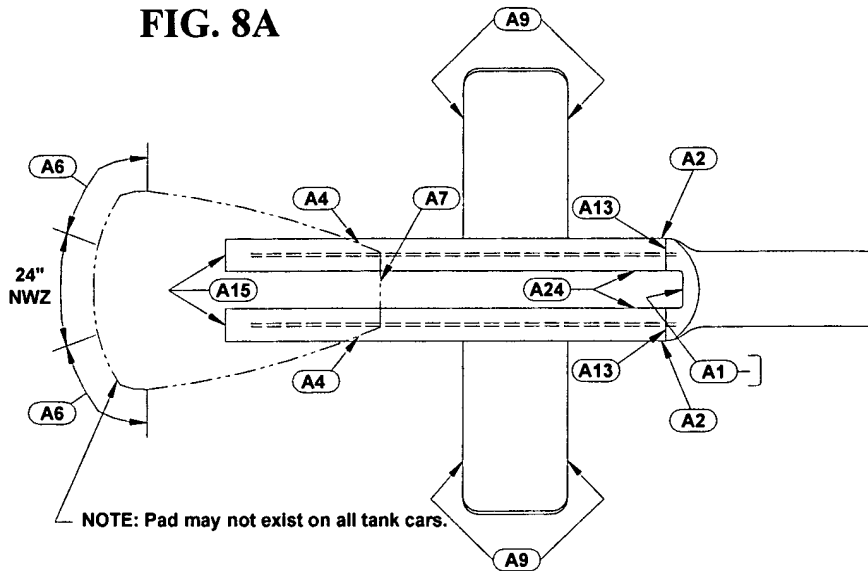


FIG. 8B

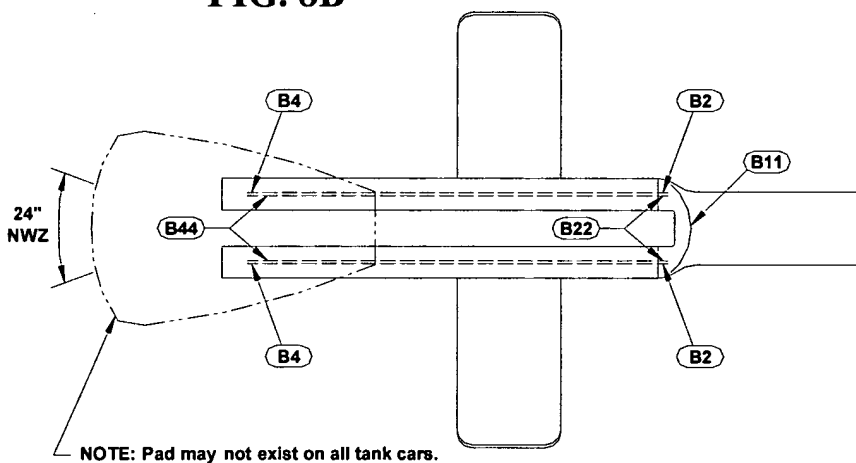


FIG. 8C

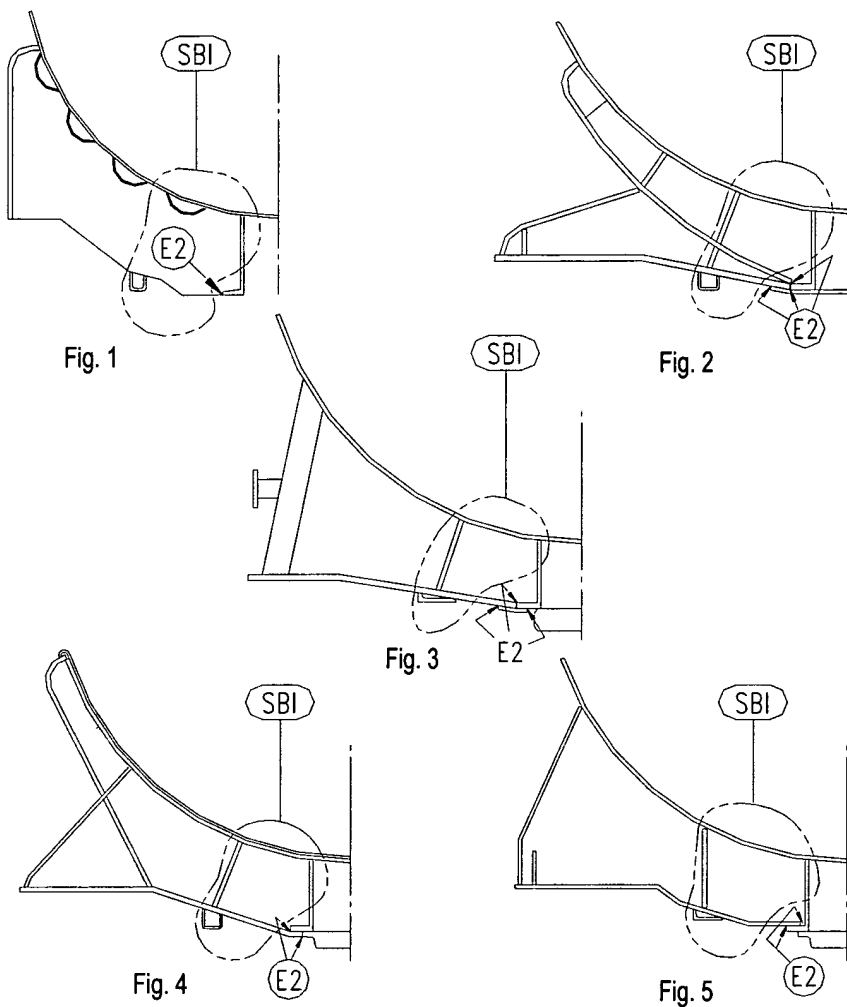




FIG. 8D

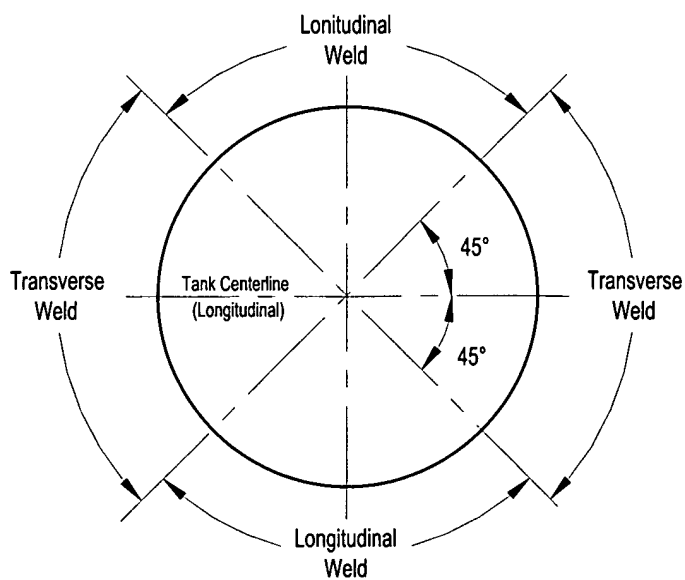


FIG. 8E

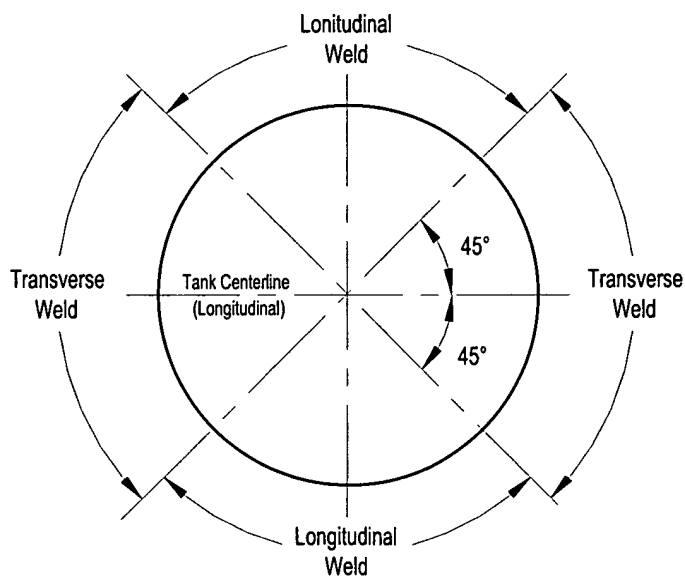


FIG. 8F

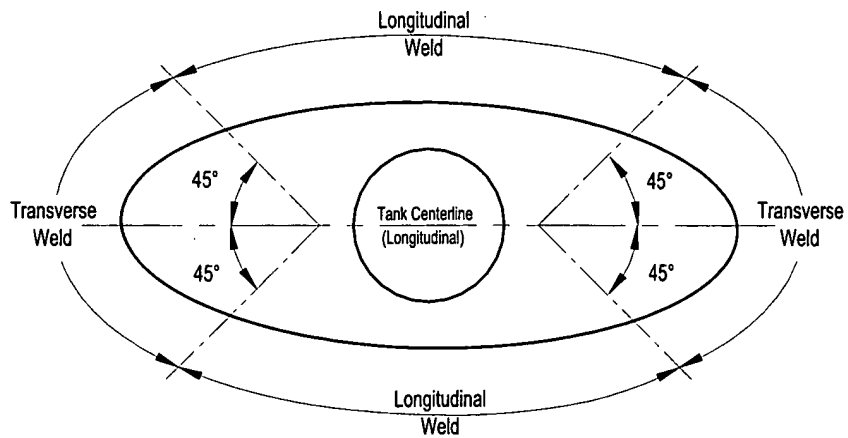


FIG. 8G

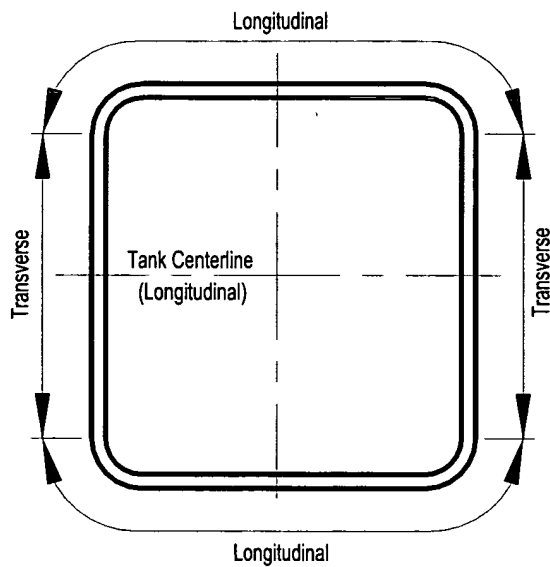


FIG. 8H

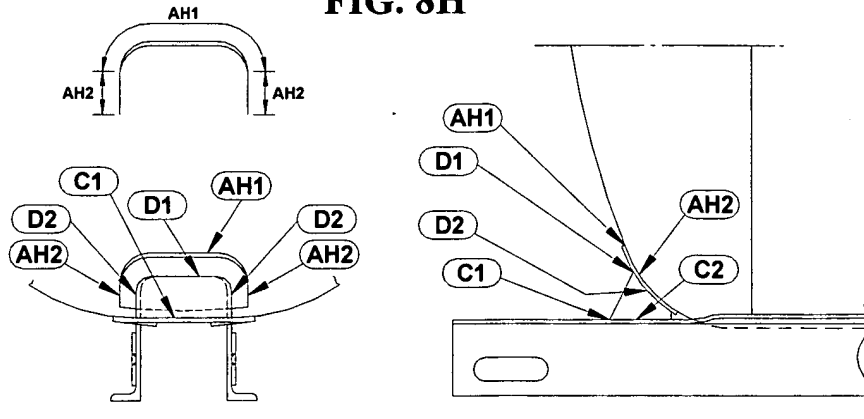


FIG. 9A

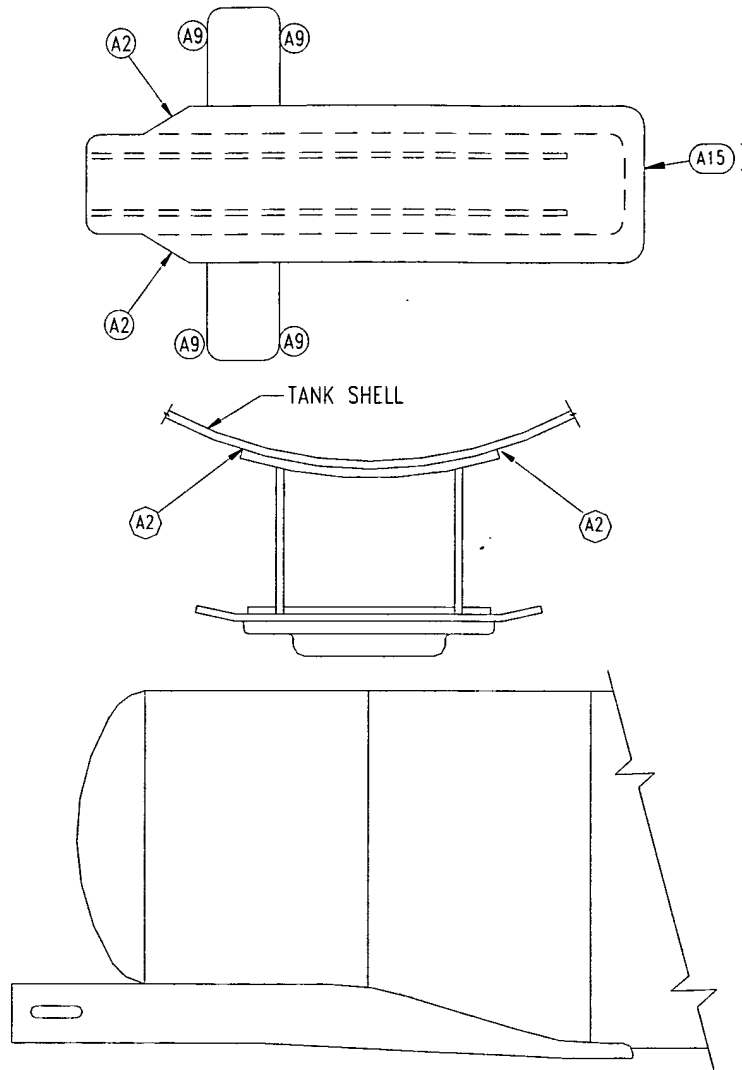


FIG. 9B

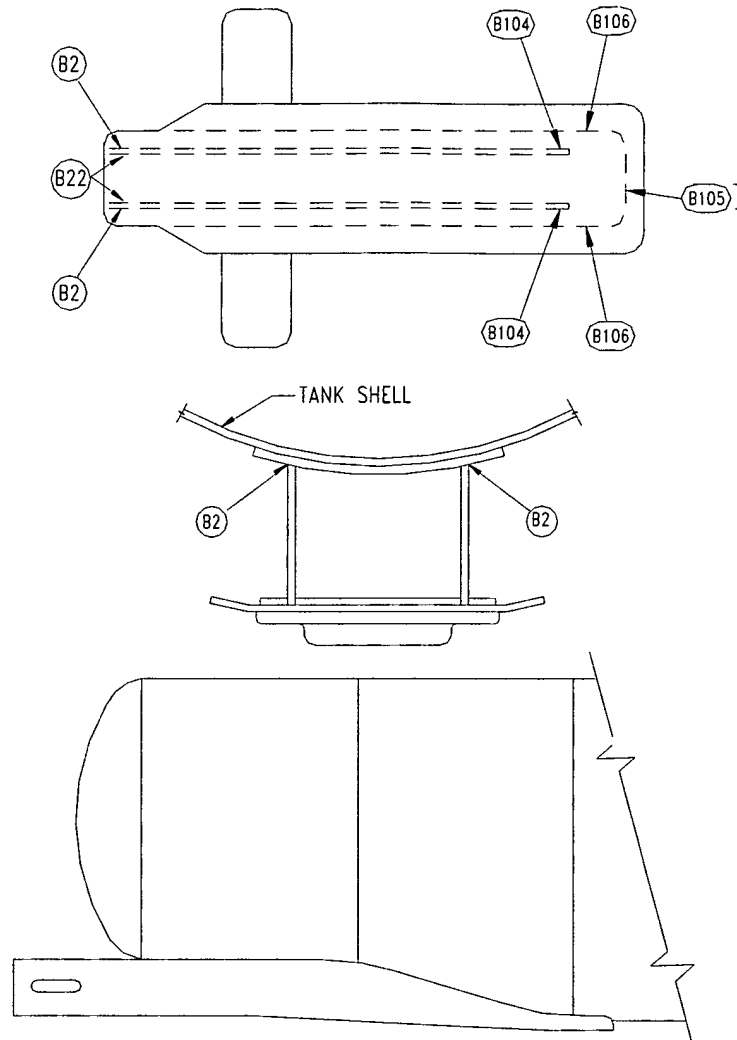


FIG. 9C

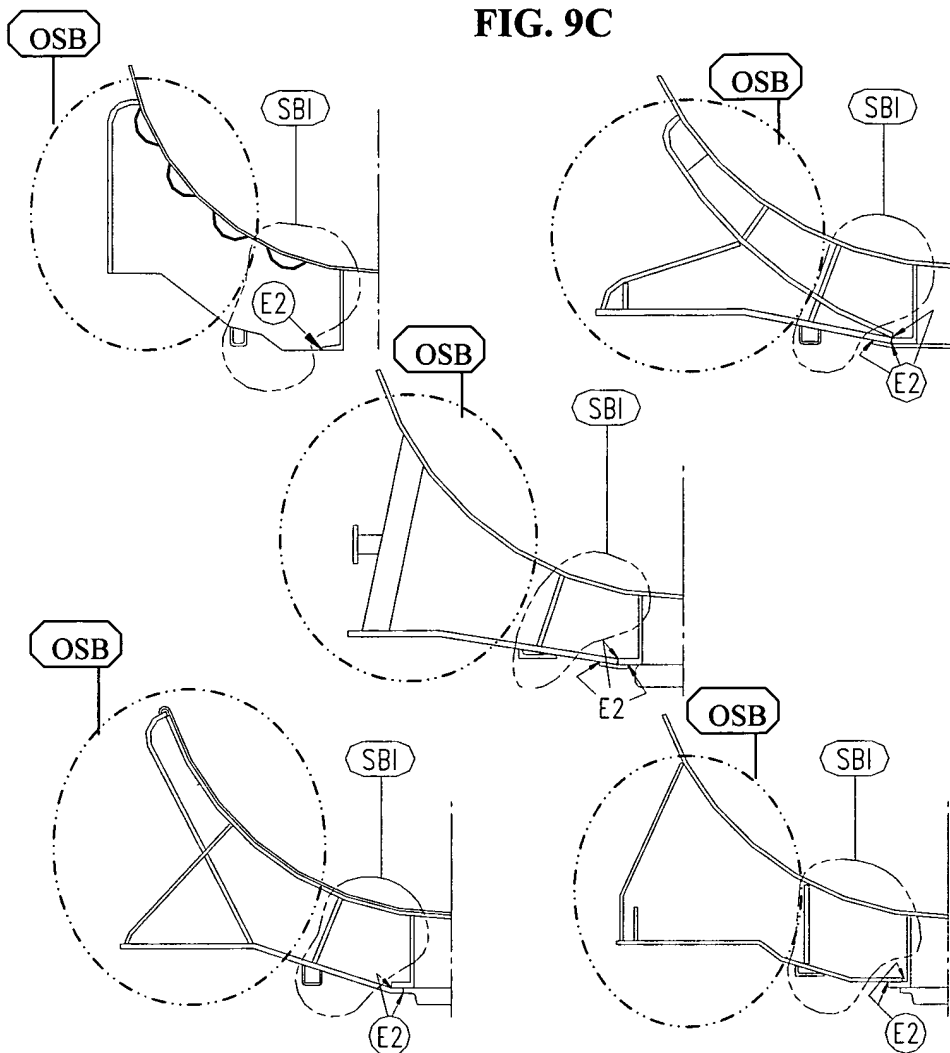


FIG. 9D

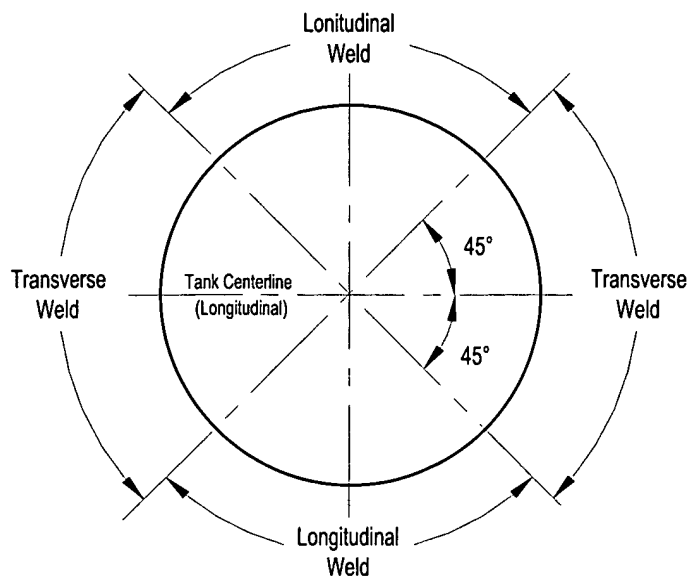


FIG. 9E

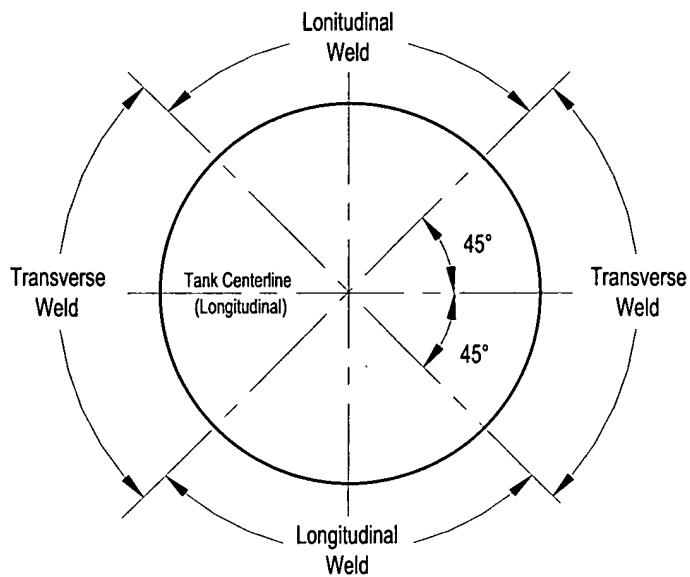


FIG. 9F

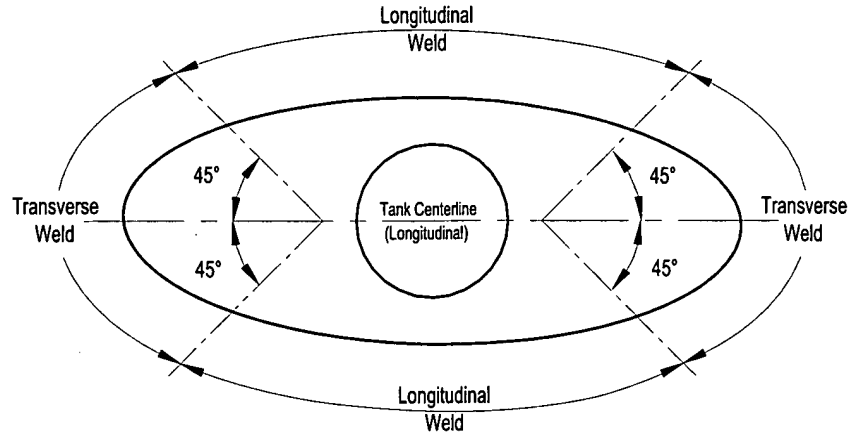


FIG. 9G

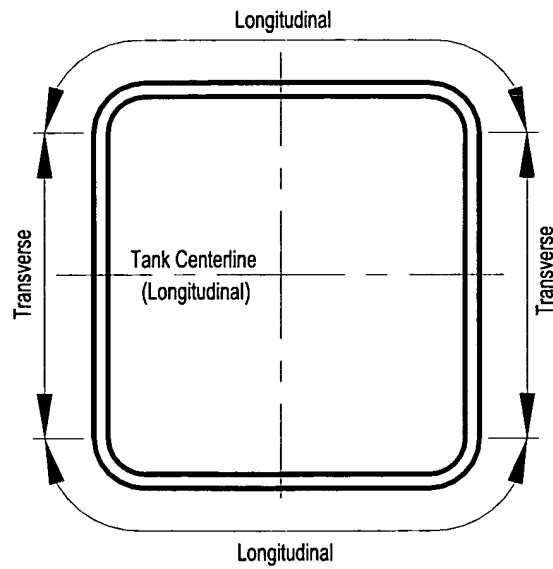
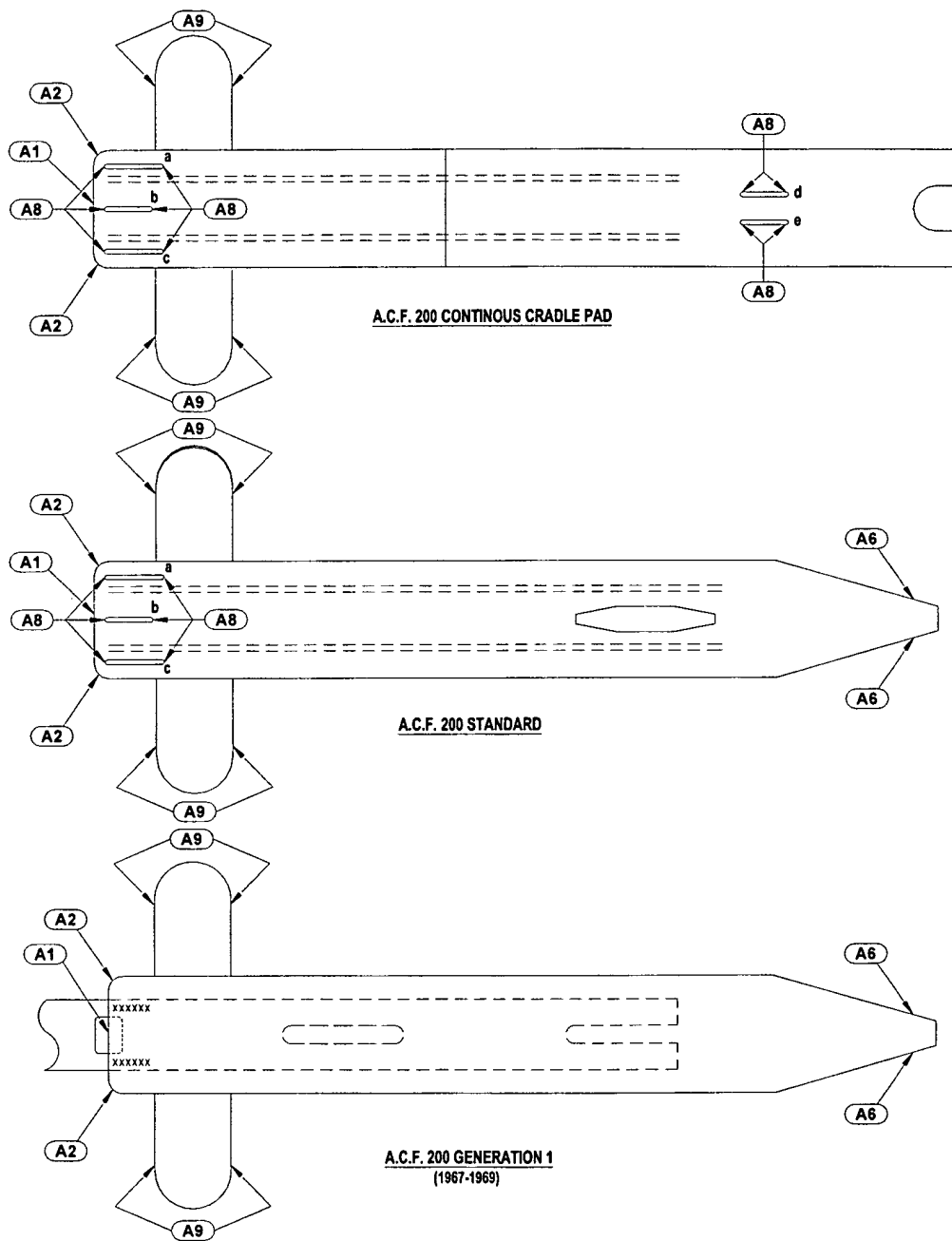




FIG. 10A



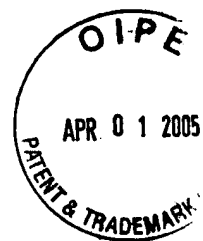


FIG. 10B

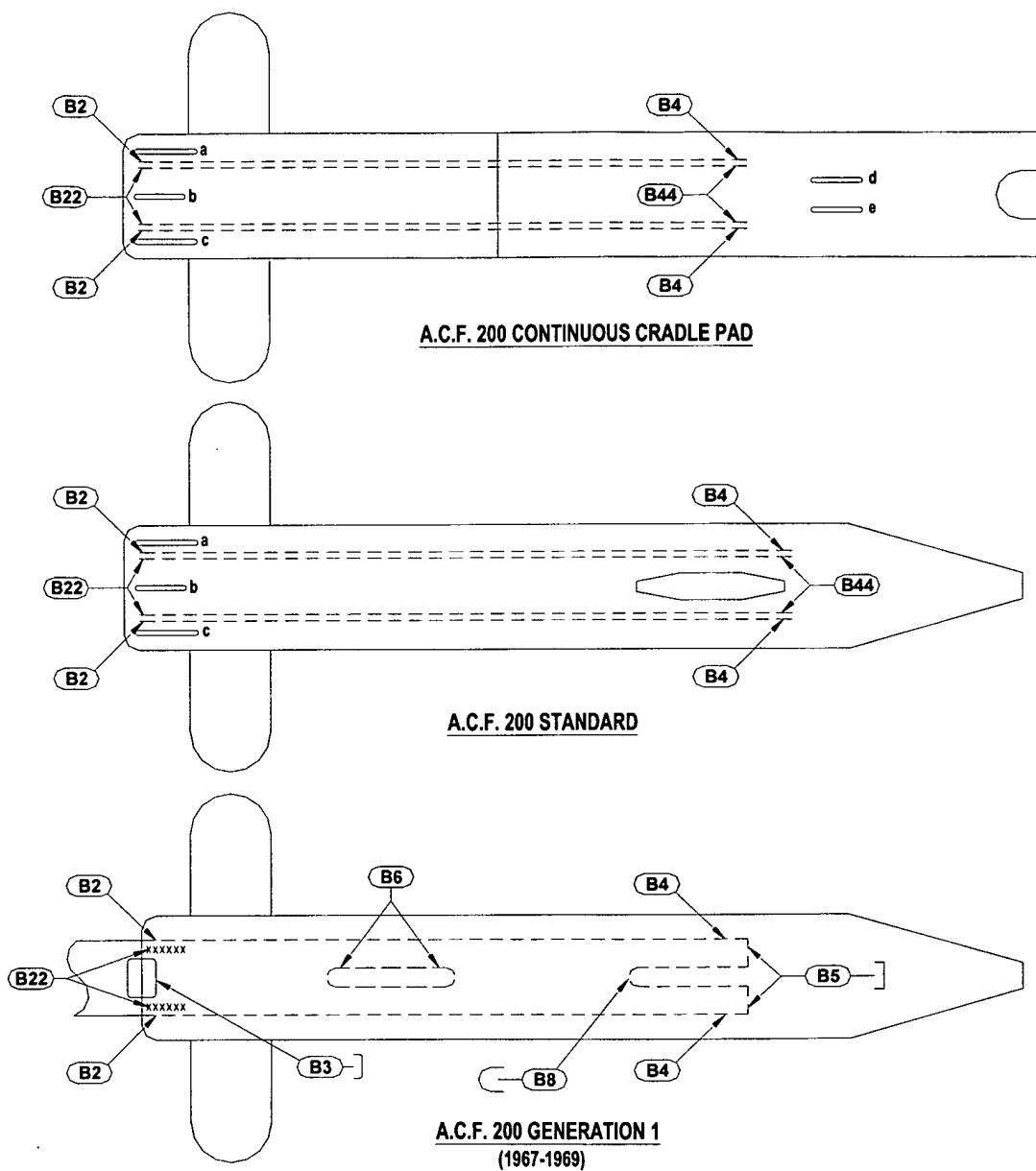




FIG. 10C

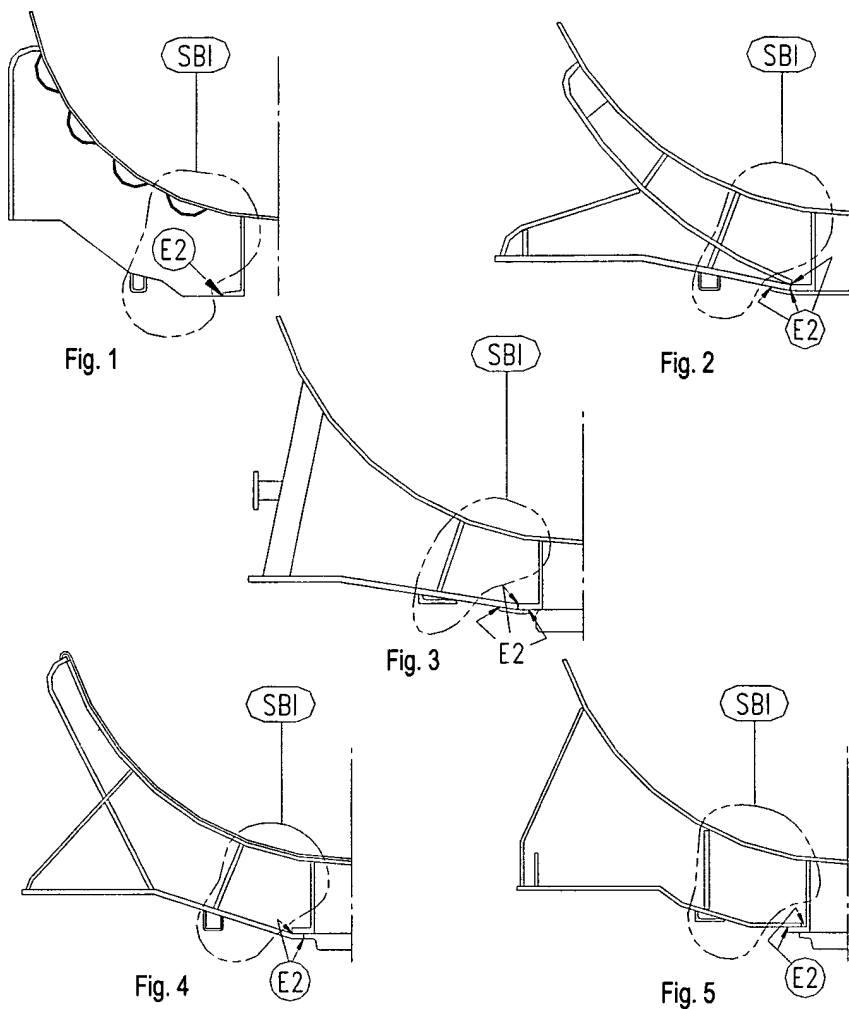




FIG. 10D

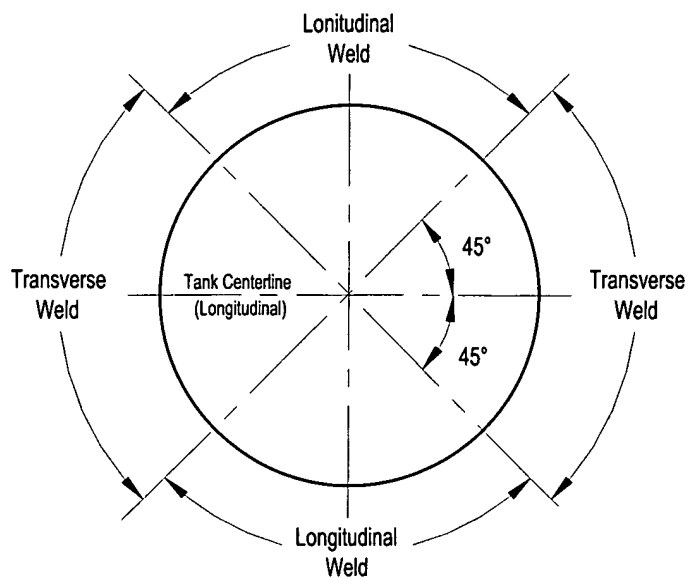


FIG. 10E

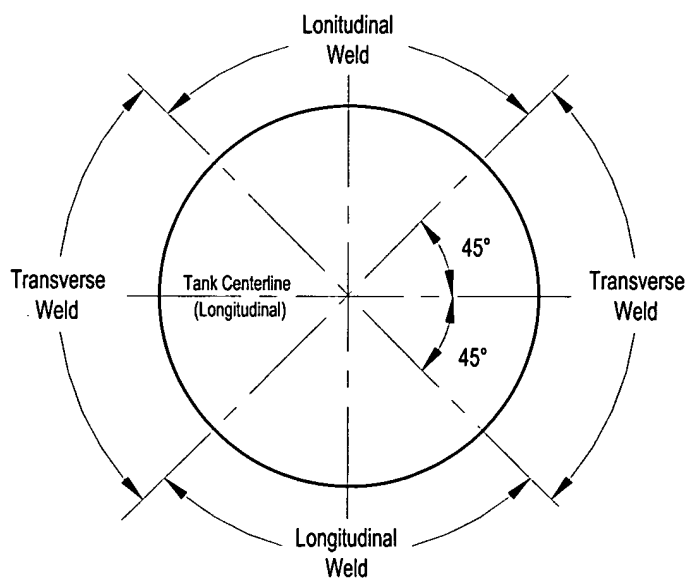


FIG. 10F

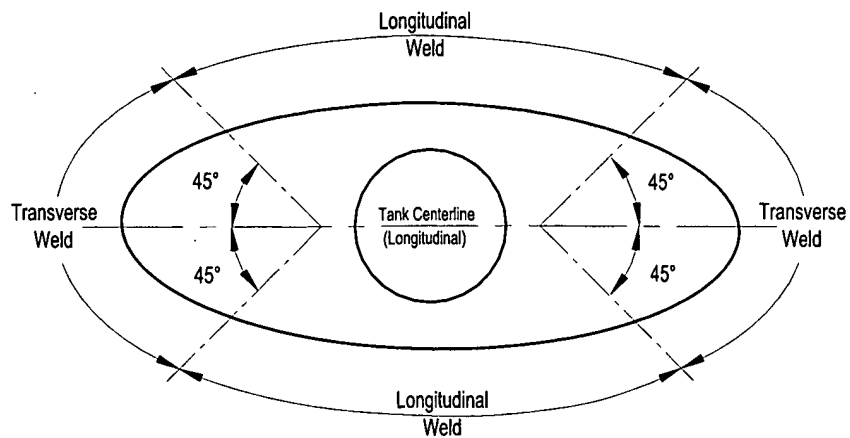
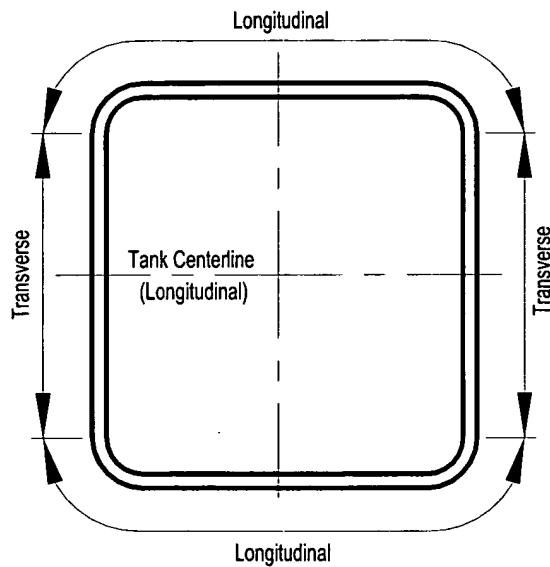


FIG. 10G



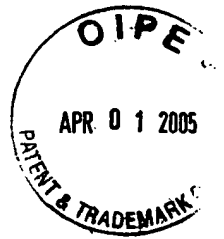
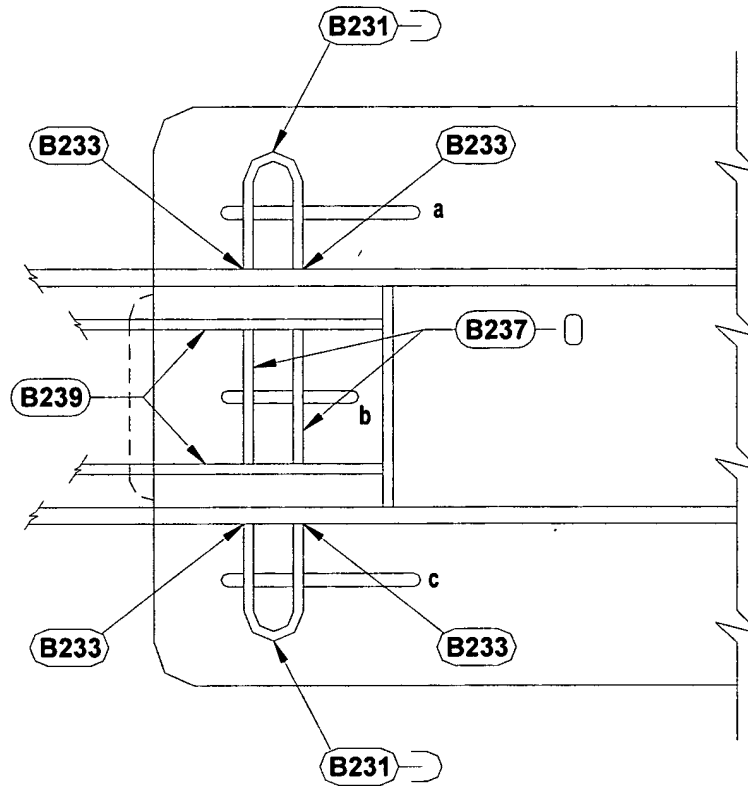
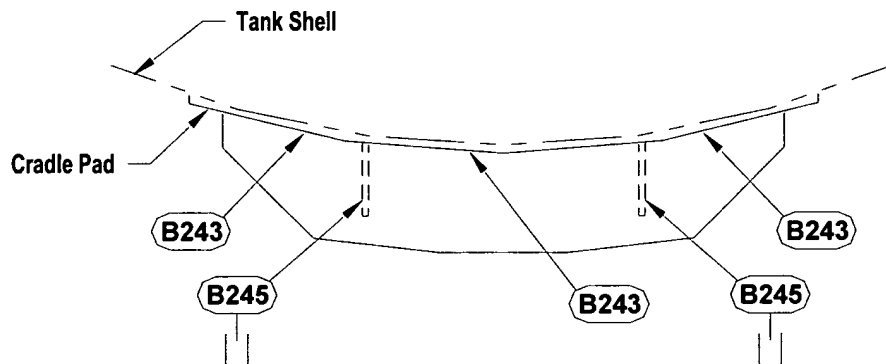


FIG. 10H

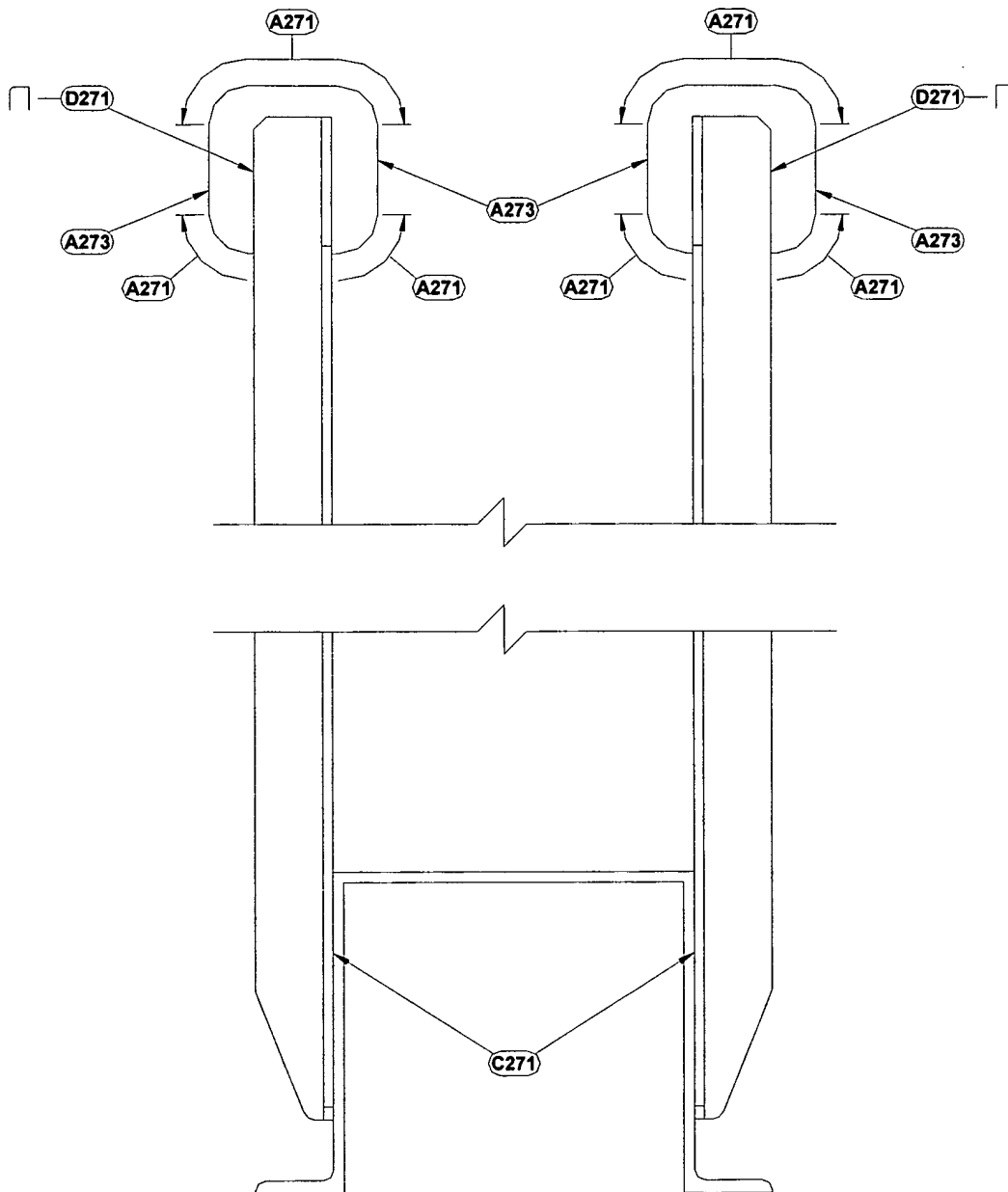


NOTE: Outboard of bolster, wing bar not shown for clarity.



NOTE: Inboard of bolster at end of cradle pad, looking outboard.

FIG. 10I



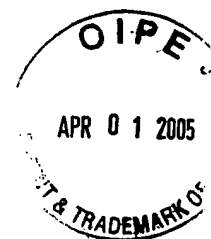
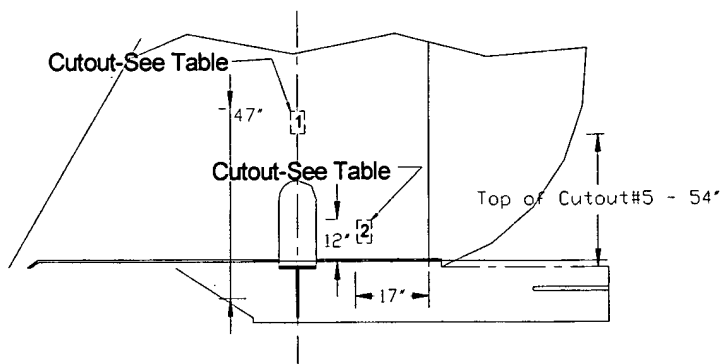


FIG. 10J

Typical ACF 200 Built Car



Drawings Not to Scale
 Jacket Removed for Clarity

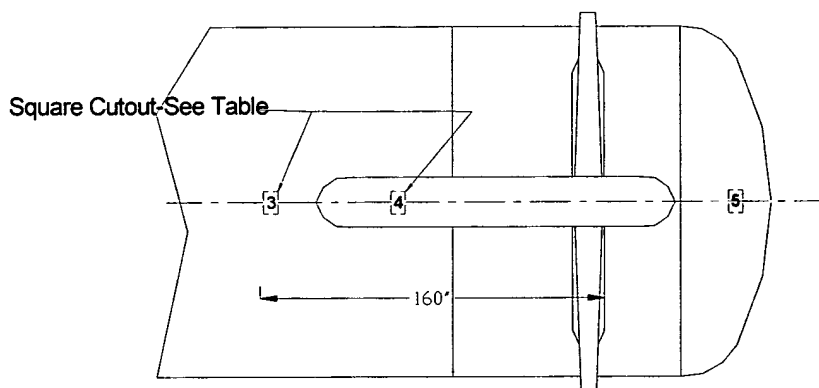
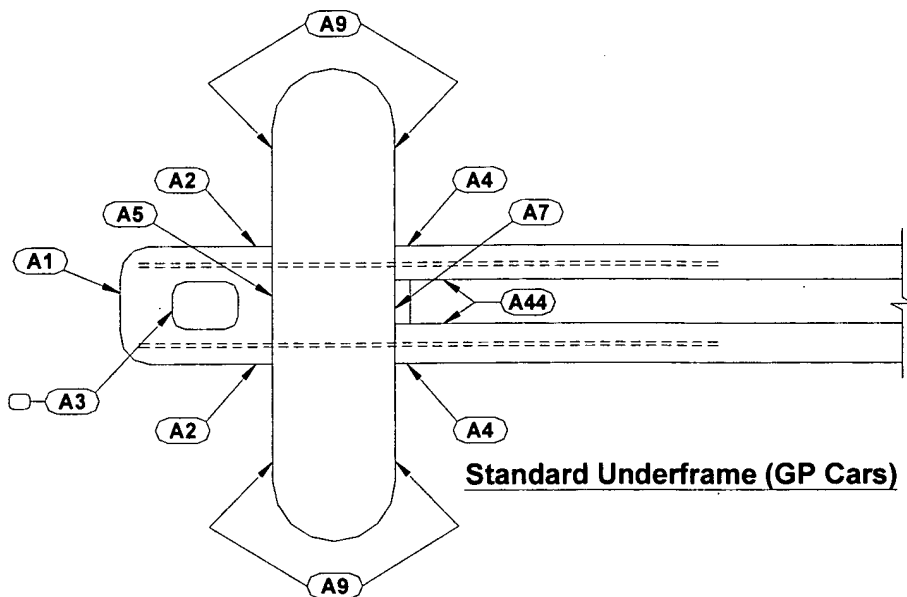
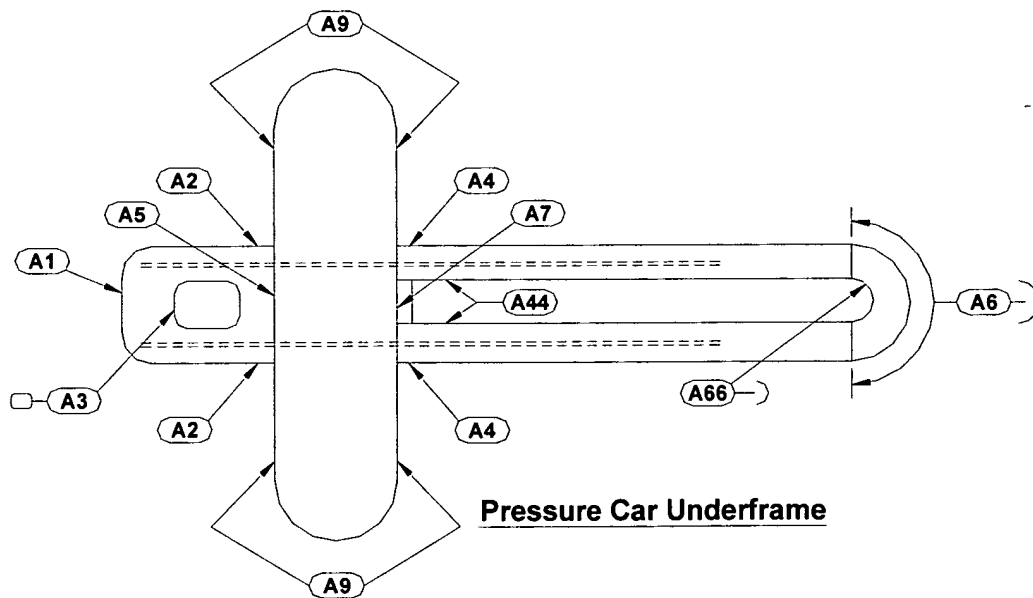


FIG. 11A



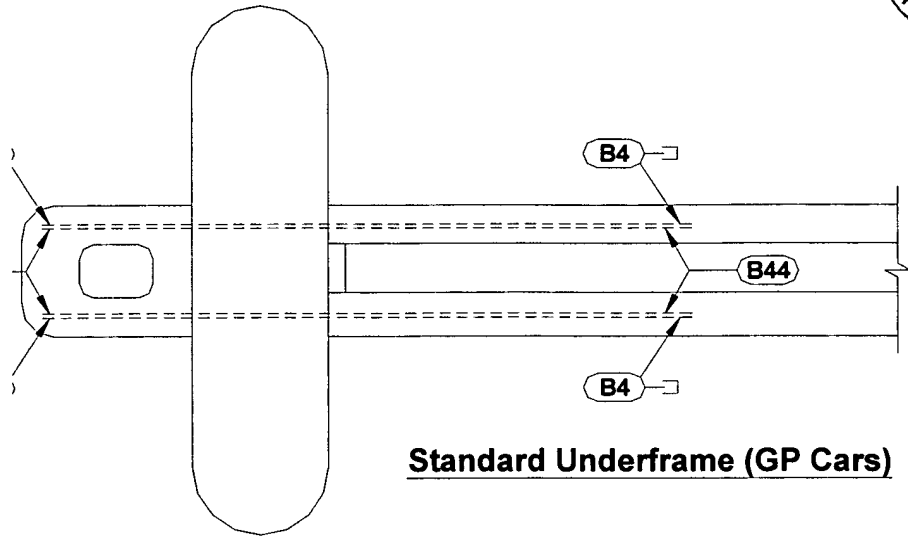
Standard Underframe (GP Cars)



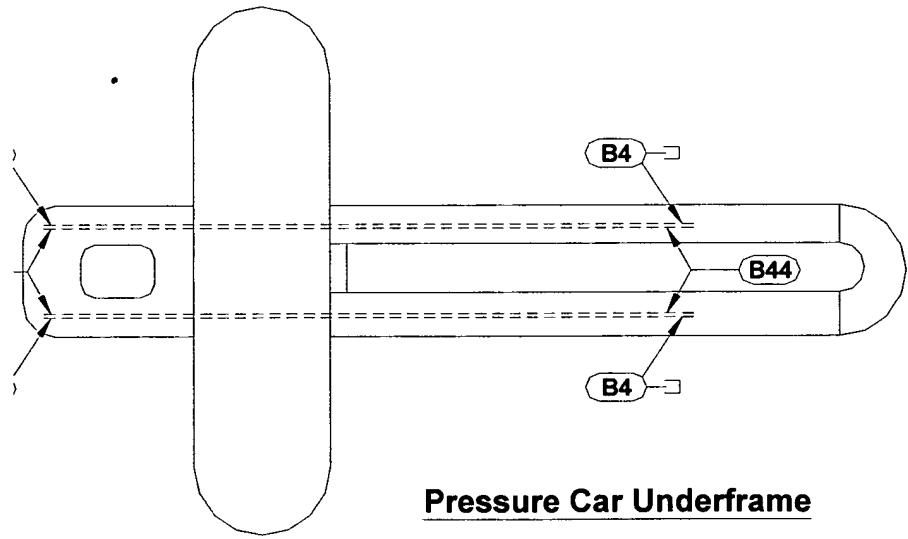
Pressure Car Underframe



FIG. 11B

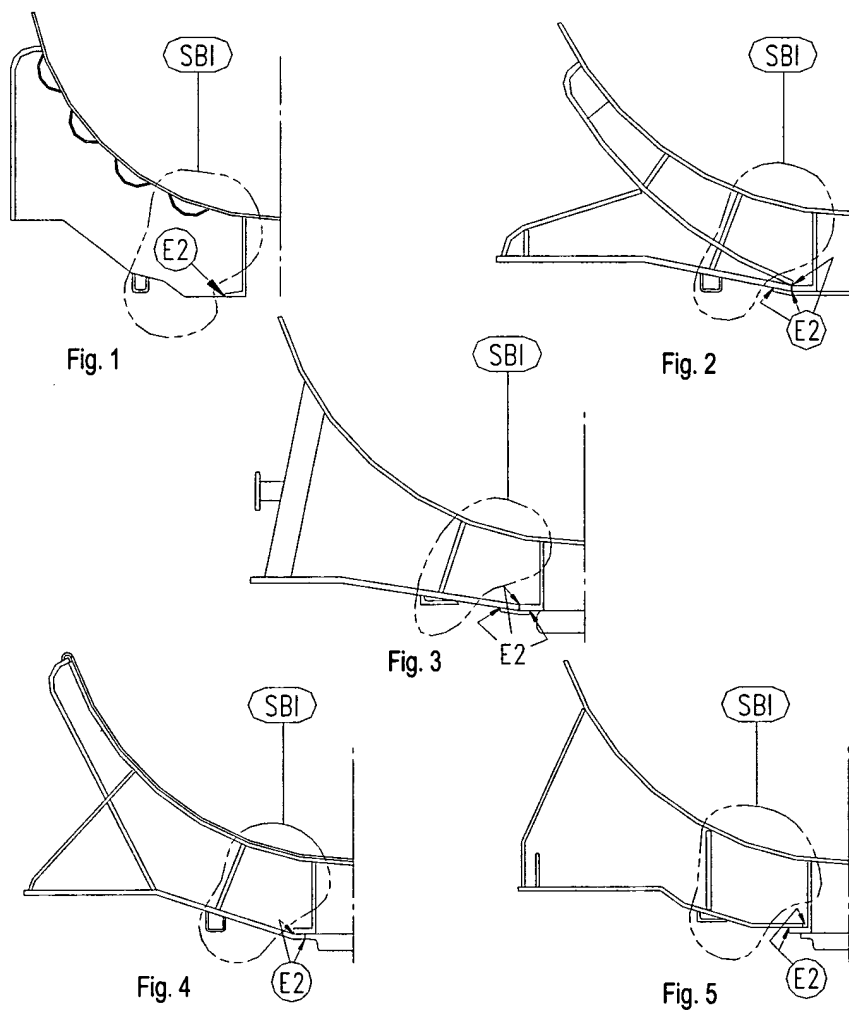


Standard Underframe (GP Cars)



Pressure Car Underframe

FIG. 11C



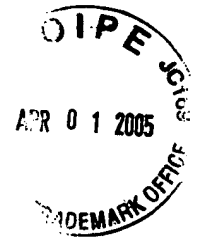


FIG. 11D

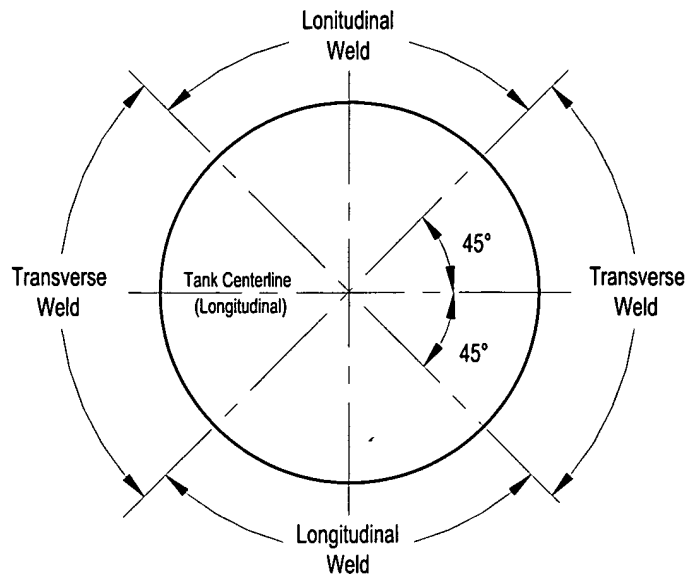


FIG. 11E

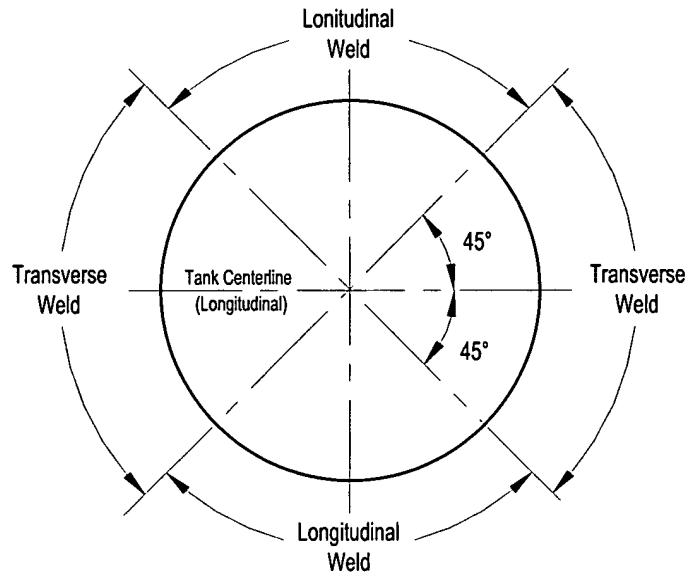


FIG. 11F

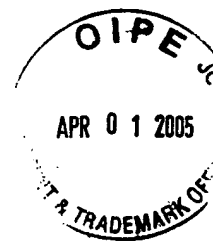
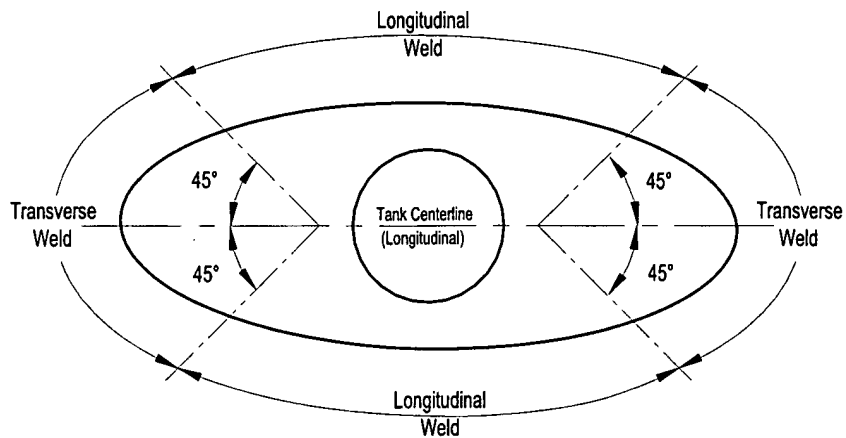


FIG. 11G

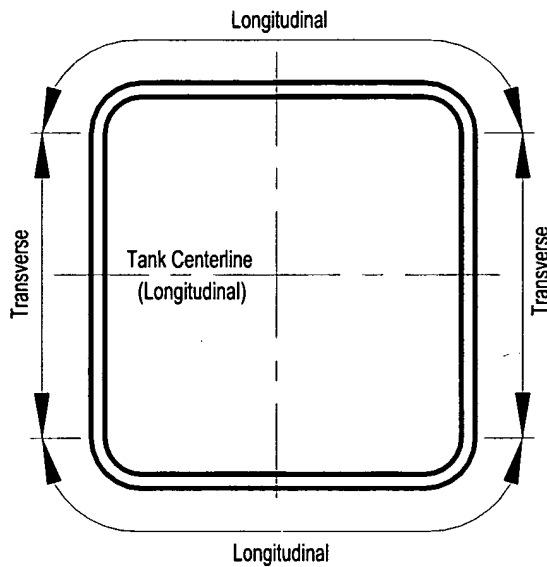


FIG. 11H

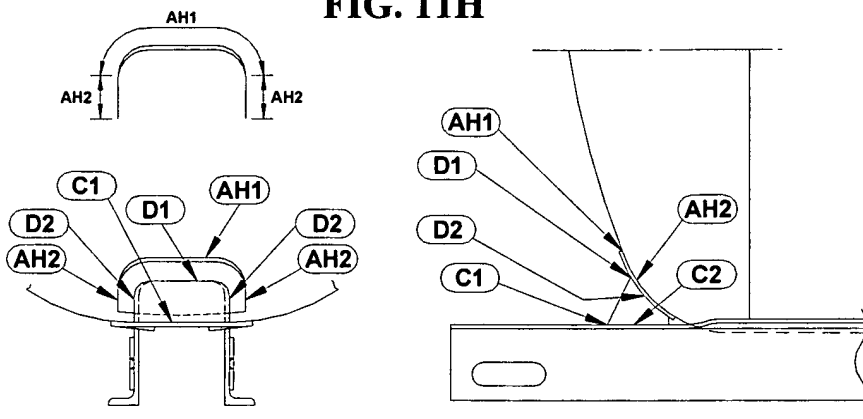




FIG. 12A

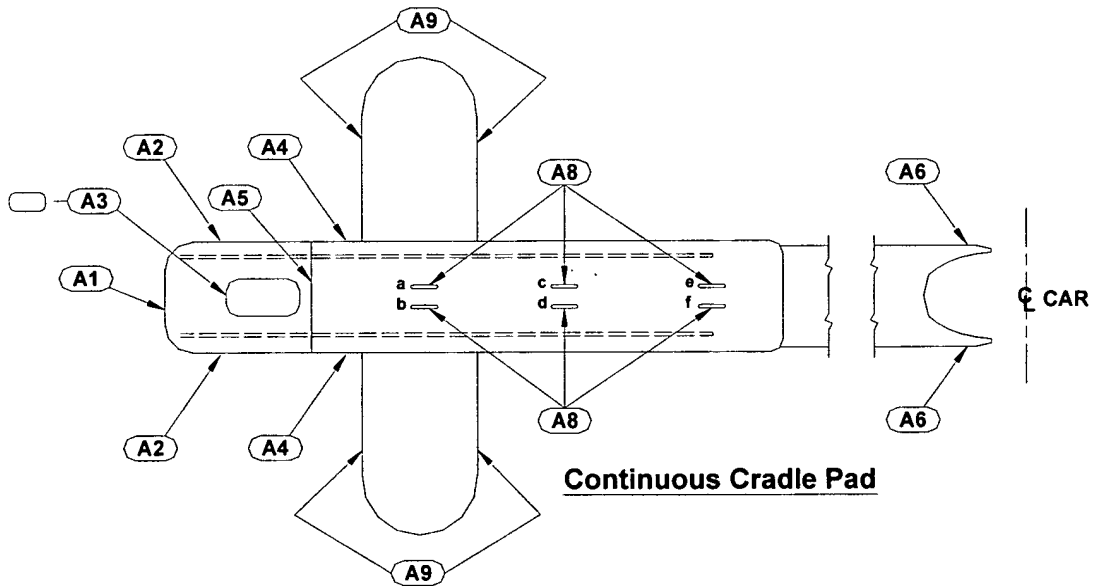
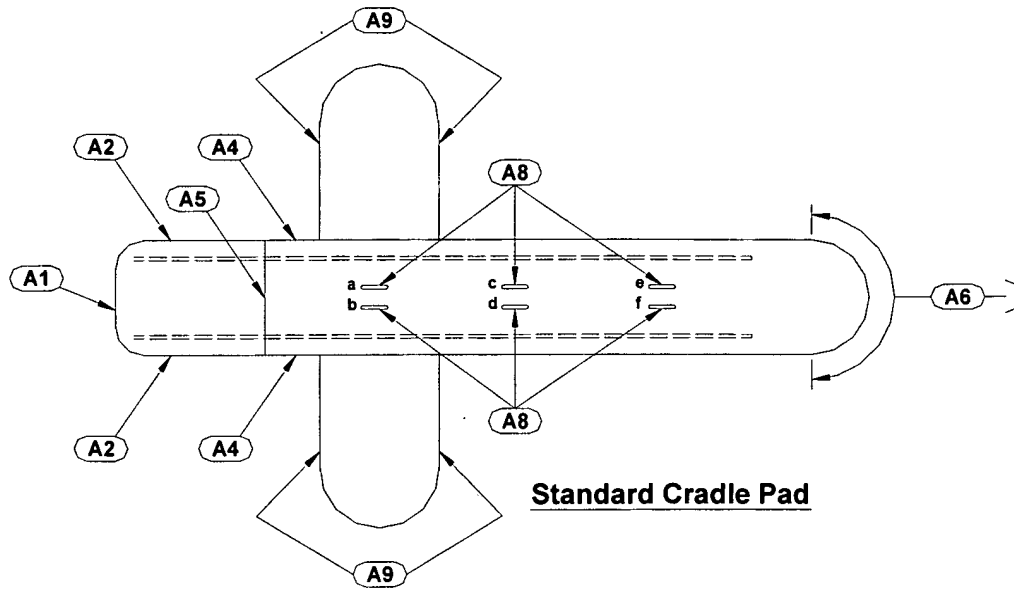


FIG. 12B

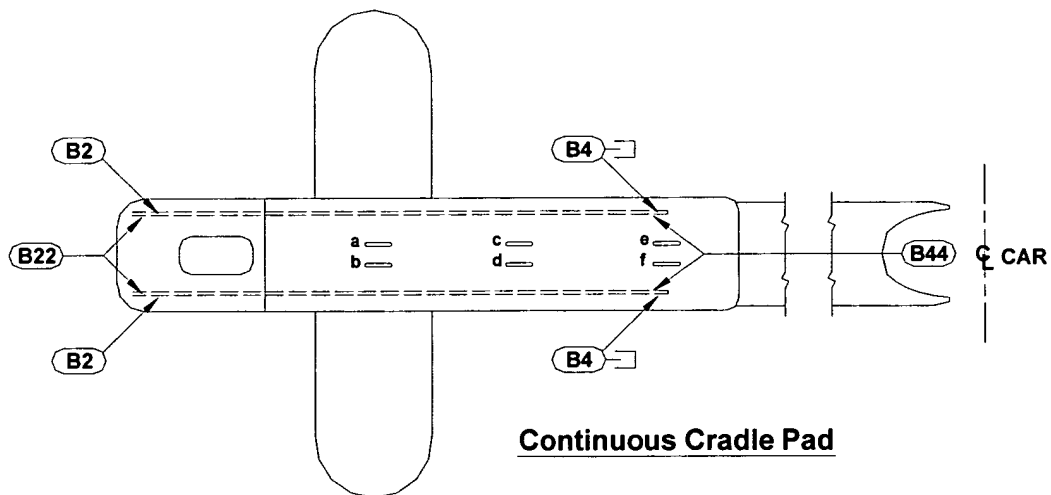
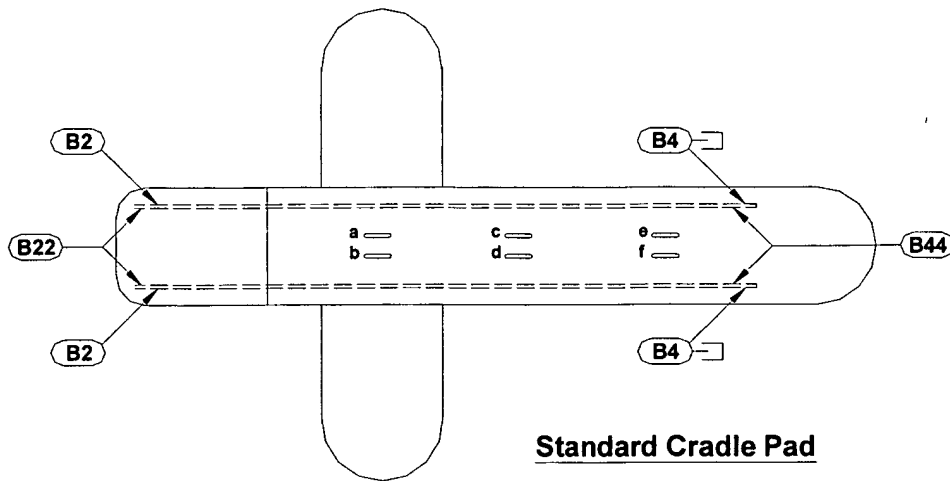


FIG. 12C

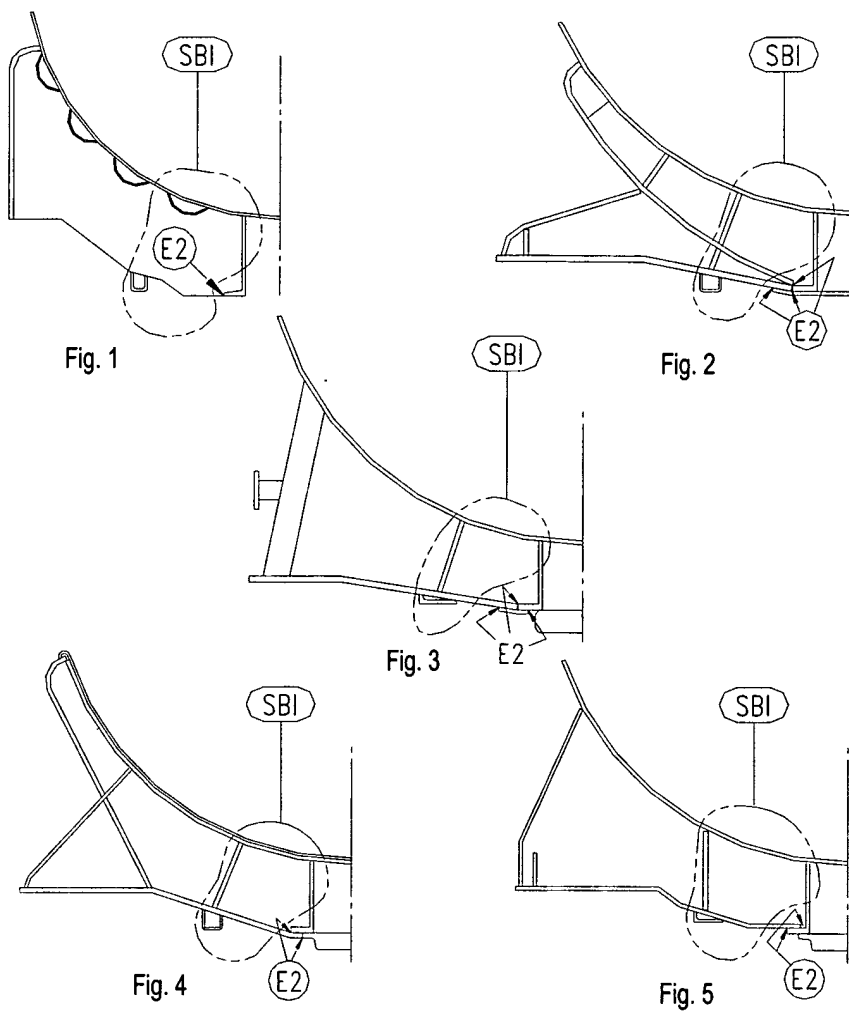




FIG. 12D

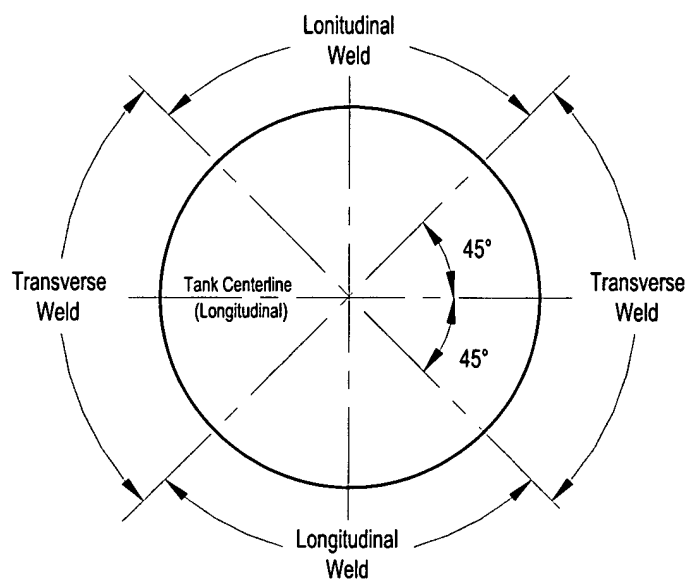


FIG. 12E

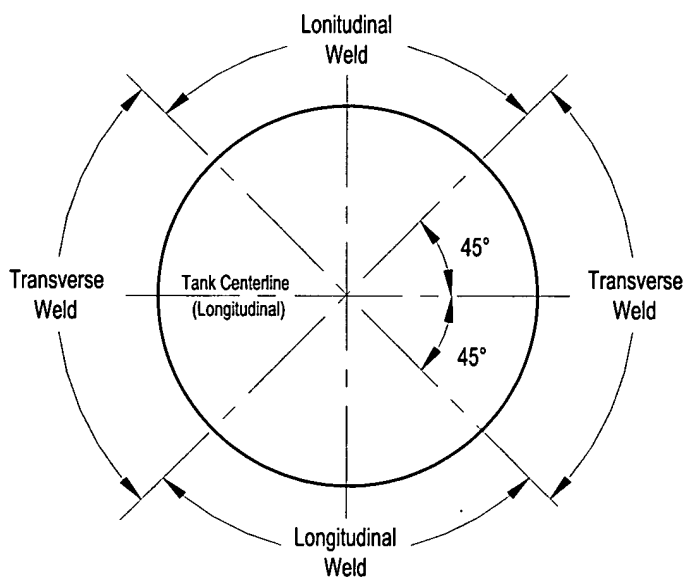




FIG. 12F

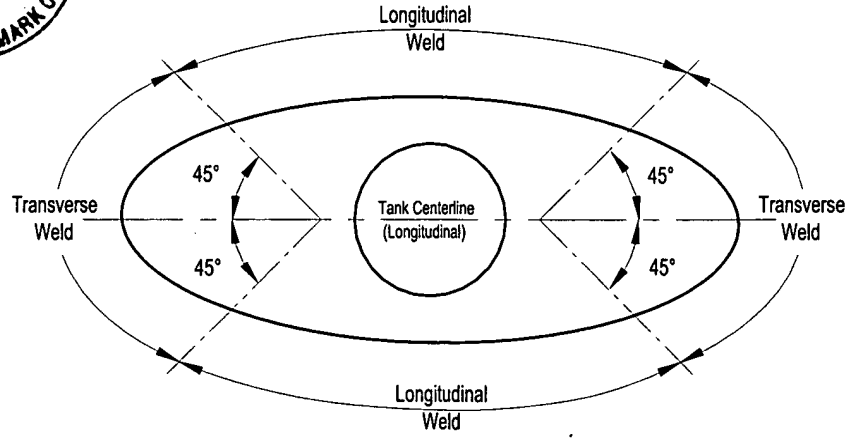


FIG. 12G

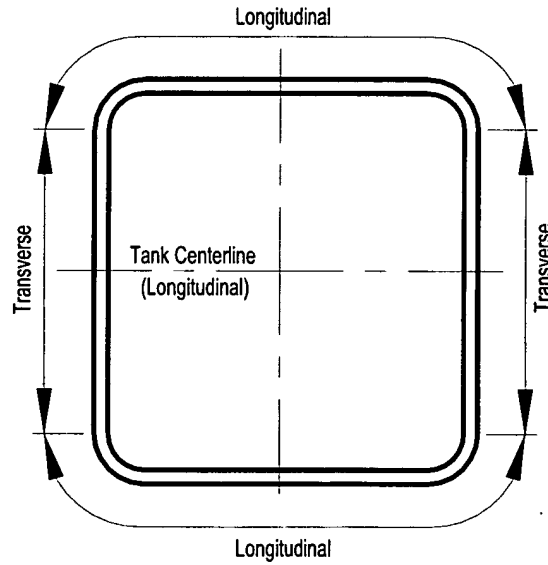
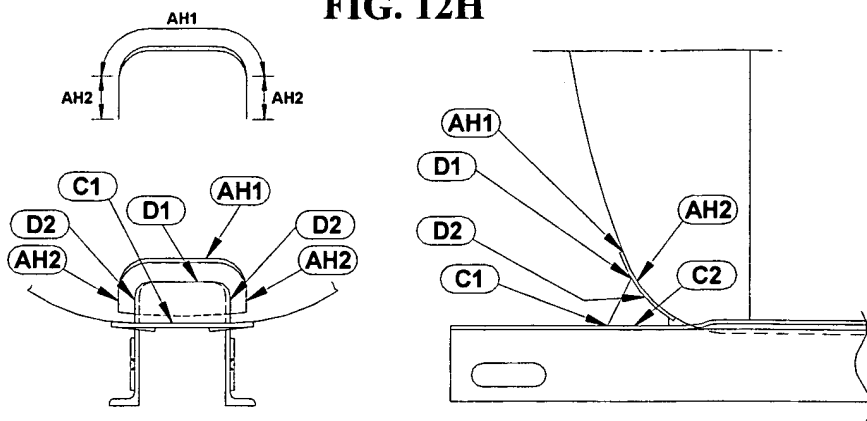


FIG. 12H



REPLACEMENT SHEETS

Filing Date: September 29, 2000

U.S. Patent Application No. 09/672,793

Title: Method and Arrangement for Inspection and Requalification of...

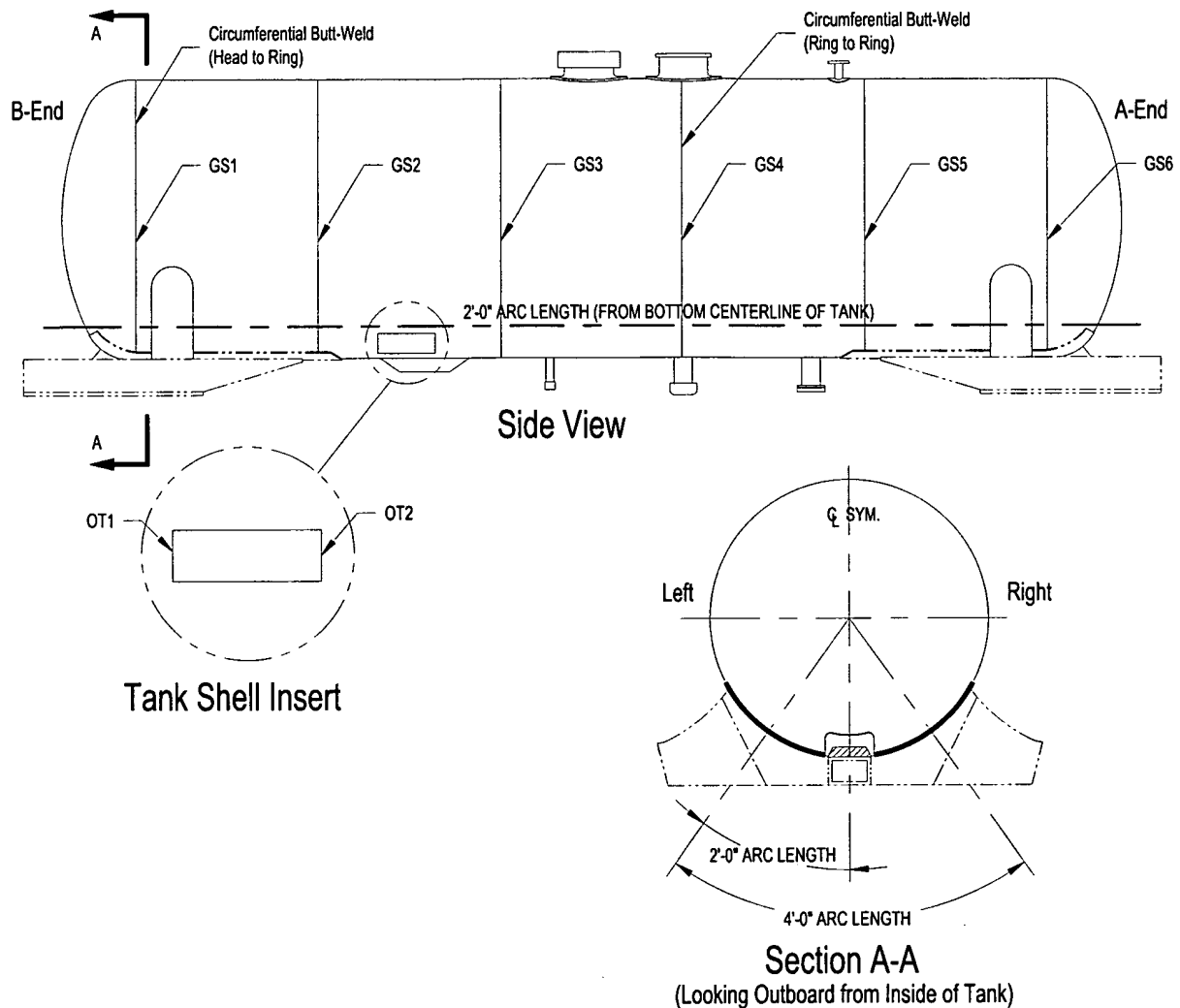
Patent Agent: Stephen T. Scherrer (Reg. No. 45,080)

Tel: 312.372.2000 Fax: 312.984.7700

Docket No. 47440-015 (p.k.a. 47440-027)

Sheet 59 of 86

FIG. 13A



REPLACEMENT SHEETS

Filing Date: September 29, 2000

U.S. Patent Application No. 09/672,793

Title: Method and Arrangement for Inspection and Requalification of...

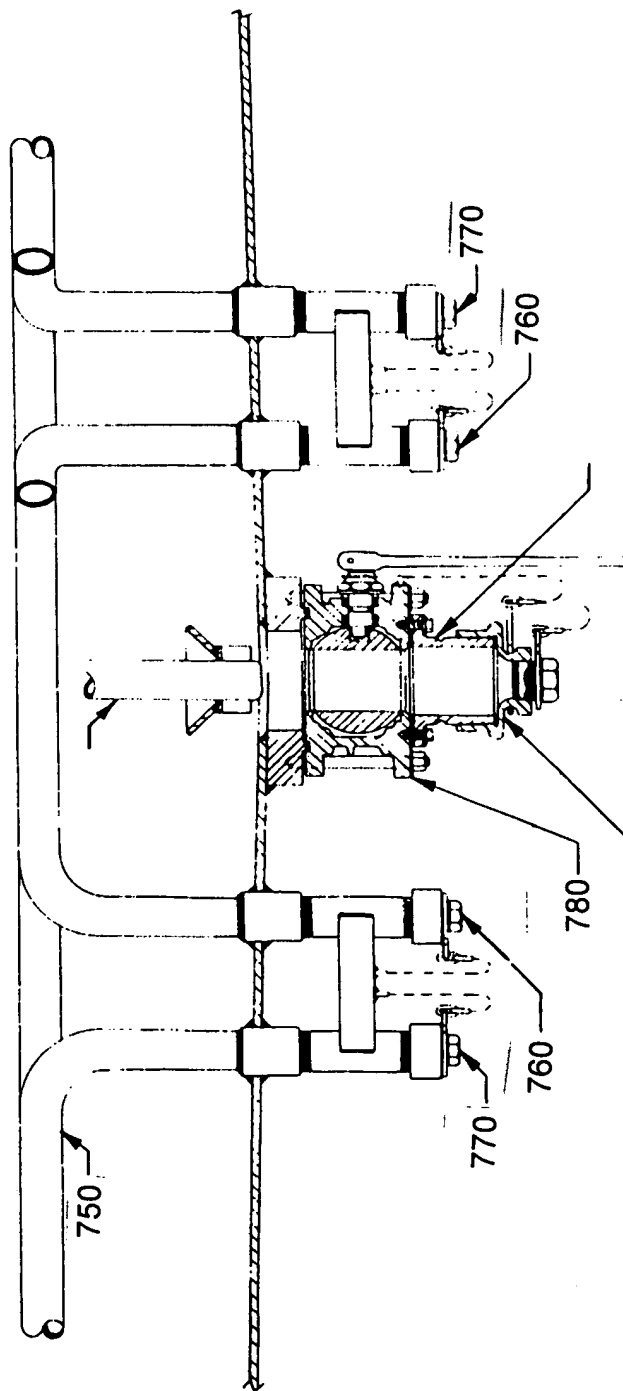
Patent Agent: Stephen T. Scherrer (Reg. No. 45,080)

Tel: 312.372.2000 Fax: 312.984.7700

Docket No. 47440-015 (p.k.a. 47440-027)

Sheet 60 of 86

FIG. 13B



REPLACEMENT SHEETS

Filing Date: September 29, 2000

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Title: Method and Arrangement for Inspection and Requalification of...

Patent Agent: Stephen T. Scherrer (Reg. No. 45,080)

Tel: 312.372.2000 Fax: 312.984.7700

Docket No. 47440-015 (p.k.a. 47440-027)

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FIG. 14A

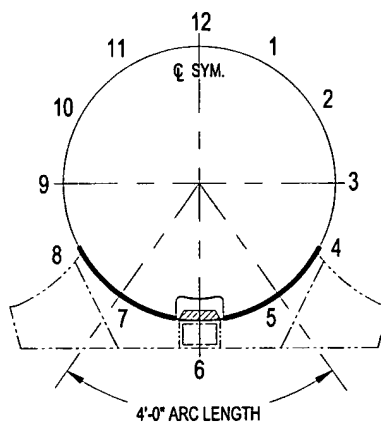
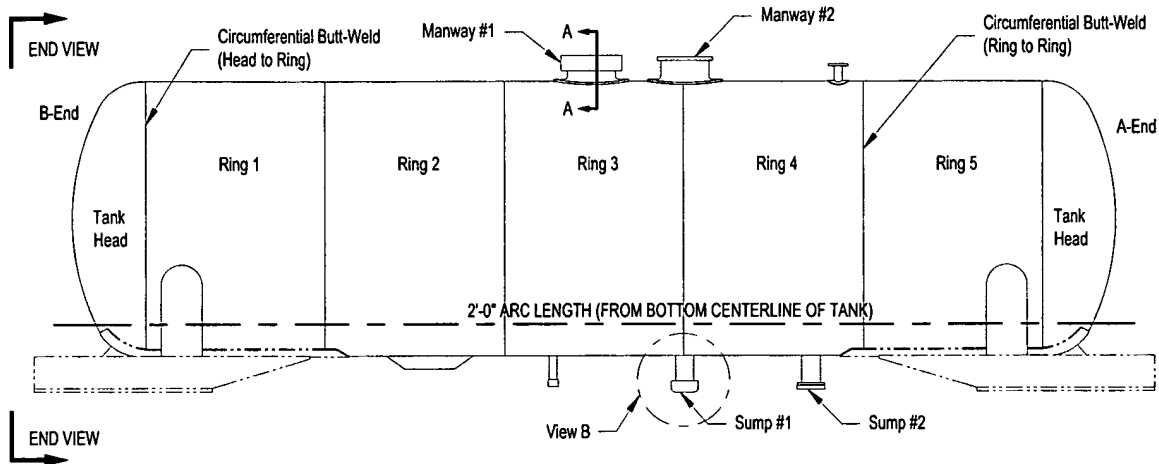
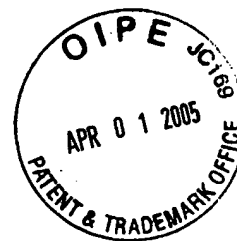




FIG. 14B

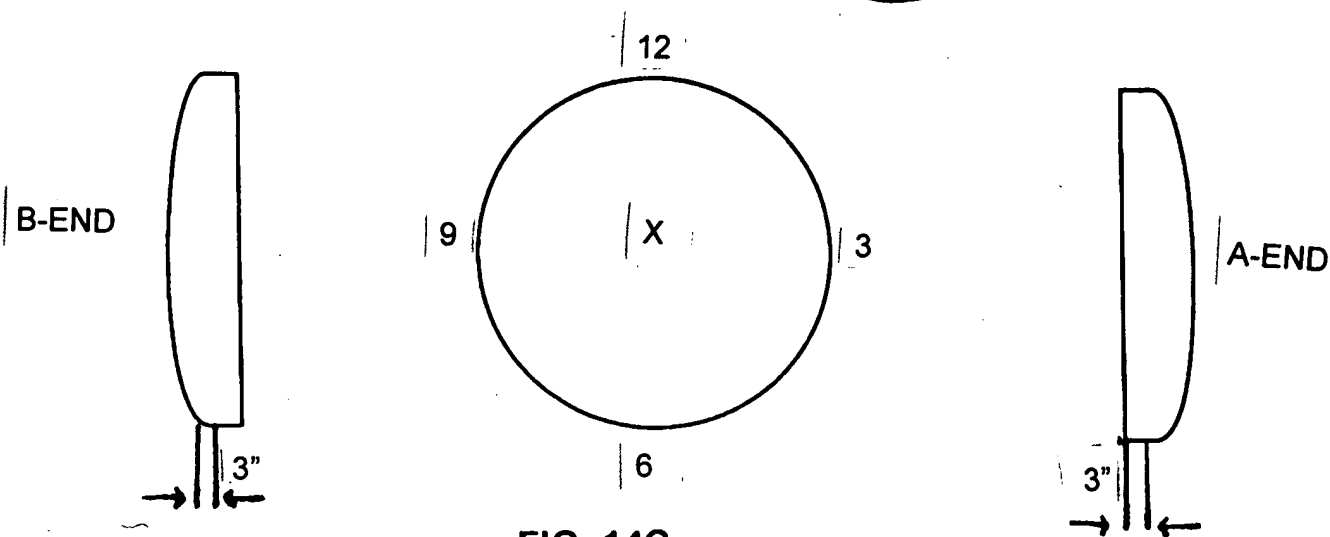


FIG. 14C

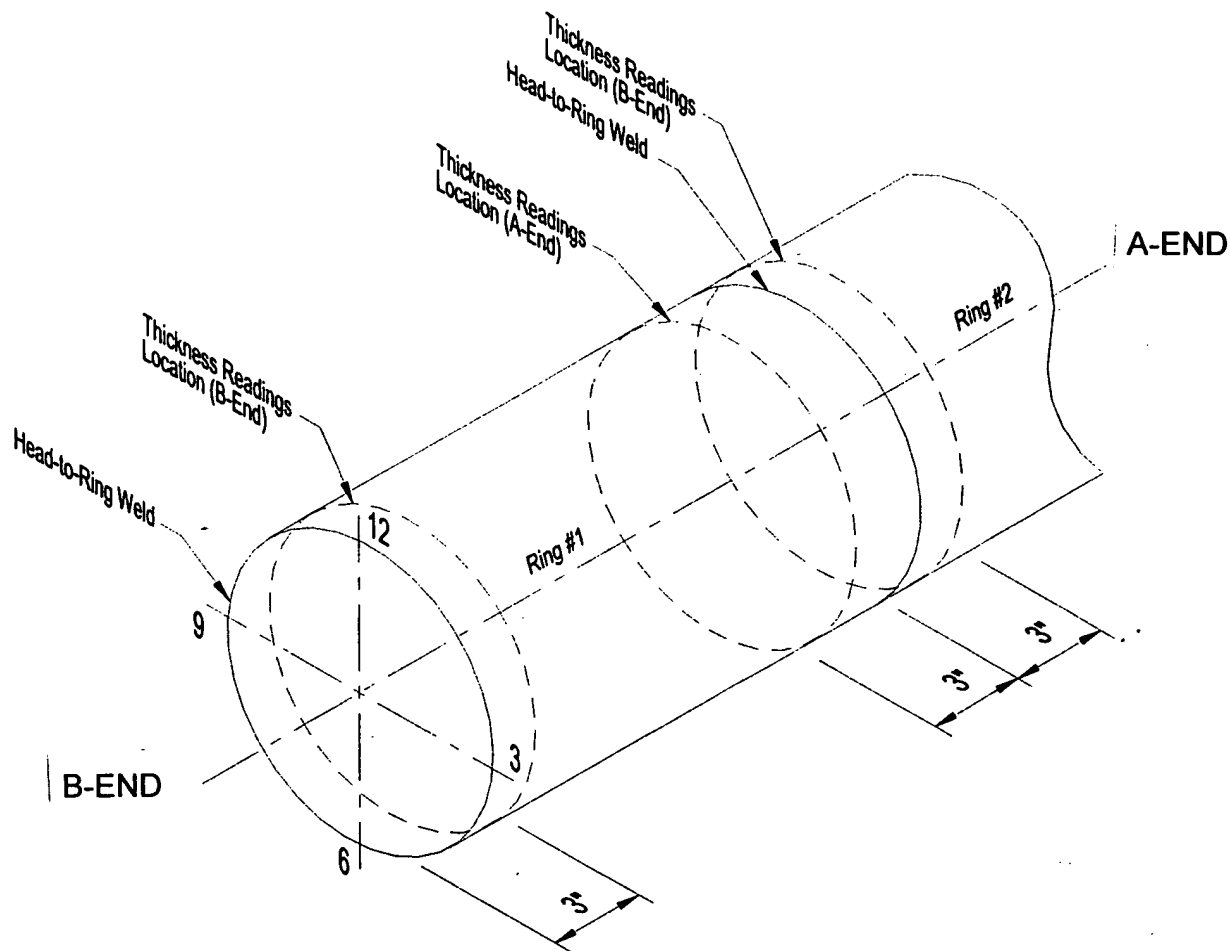


FIG. 15A

TABLE 1: ALLOWABLE SAFETY RELIEF VALVE PRESSURE TOLERANCES

Nominal STD ¹ (psig)	Tolerance (+/-) ⁴ (psig)	Minimum STD ¹ (psig)	Maximum STD ¹ (psig)	Minimum VTP ² (psig)	Gauge Range ⁵ (psig)	Maximum Gauge Increment ⁵ (psig)
35	3	32	38	28	0-100	1
75	3	72	78	60	0-150/160	1
150	4.5	145.5	154.5	120	0-300	2
225	6.75	218.25	231.75	180	0-400	5
247.5	7.4	240.1	254.9	196	0-400	5
255	7.7	247.3	262.7	204	0-400	5
280.5	8.4	272.1	288.9	224	0-500	5
300	9	291	309	240	0-500	5
330	10	320	340	264	0-500	5
375	11.25	363.75	386.25	300	0-600	10
450	13.5	436.5	463.5	360	0-750	10

NOTES:

1. STD indicates start-to-discharge.
2. VTP indicates vapor-tight pressure.
3. Valves should be set or reset to NOMINAL STD pressure.
4. DOT requirements for tolerances are given in 49CFR173.31(c)(6). Pressure tolerances listed above have been shown here to assist testing personnel and are not intended to alter any DOT requirements.
5. Digital or dial gauges of greater range may be used if accuracy and sensitivity levels are equal to or better than required above.





FIG. 15B

TYPICAL INTERNAL STYLE SAFETY RELIEF VALVE
Midland A-1075-JVP Design

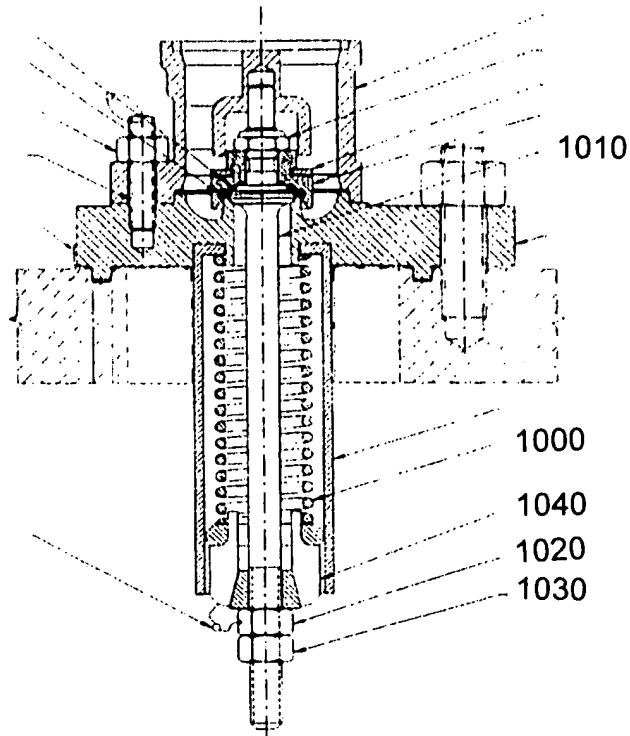


FIG. 15C

TYPICAL TOP MOUNTED SAFETY RELIEF VALVE
Midland A-1435 Design

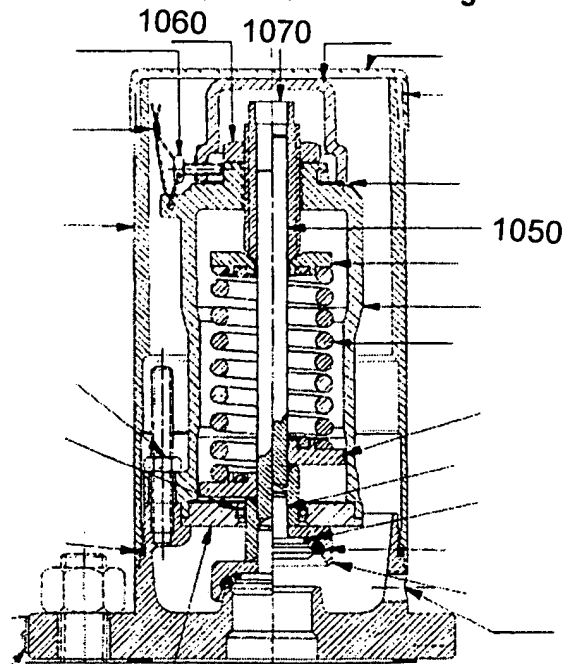


FIG. 15D
TYPICAL SAFETY VENT
Midland A-424 Design

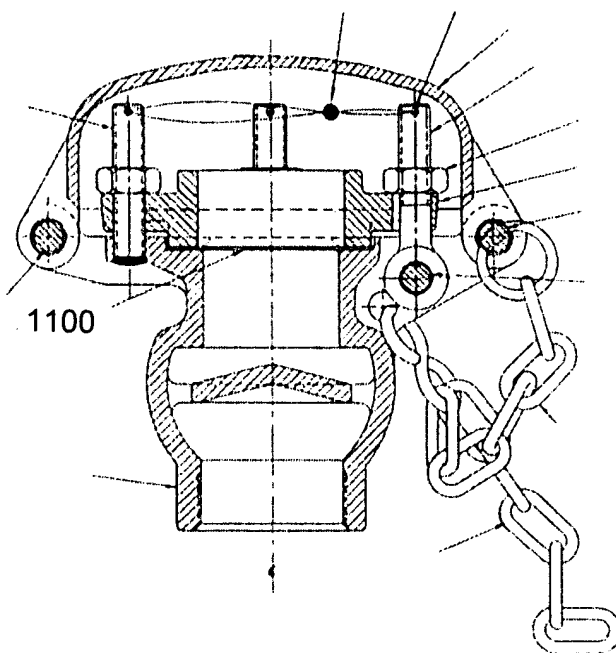
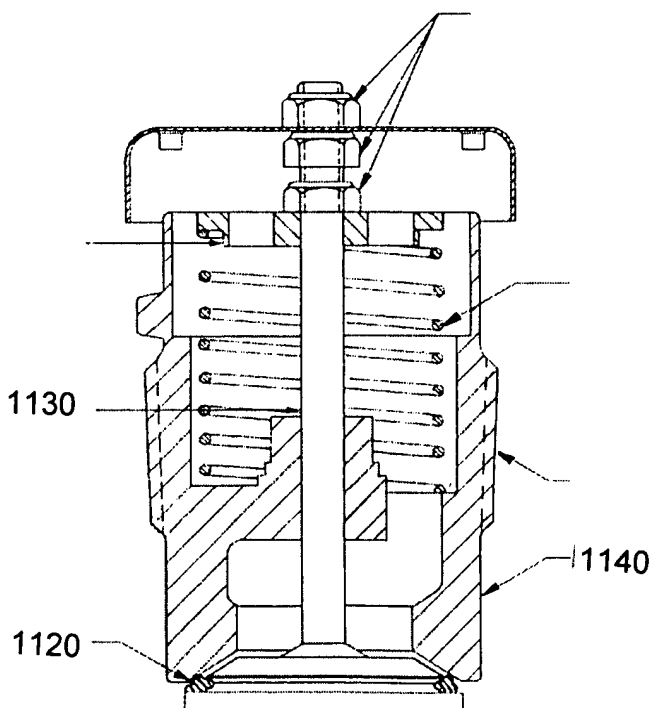


FIG. 15E
VACUUM RELIEF VALVE
Midland A-208-W-10 Design



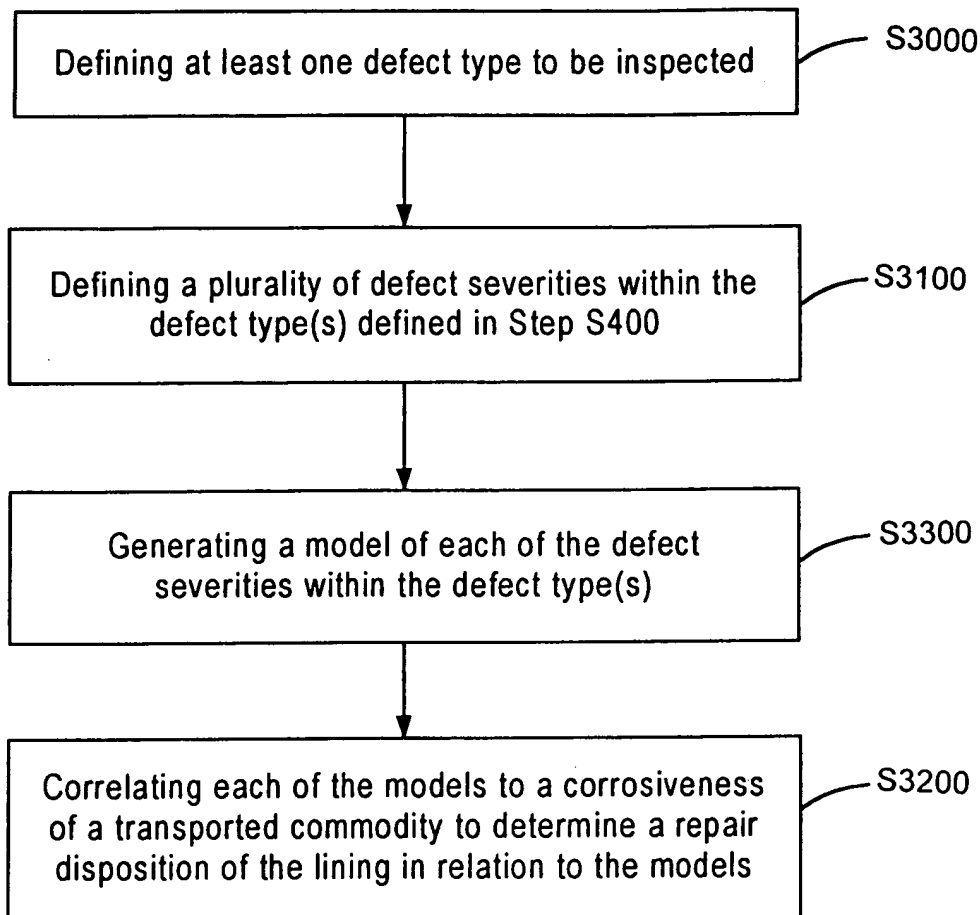


FIG. 16

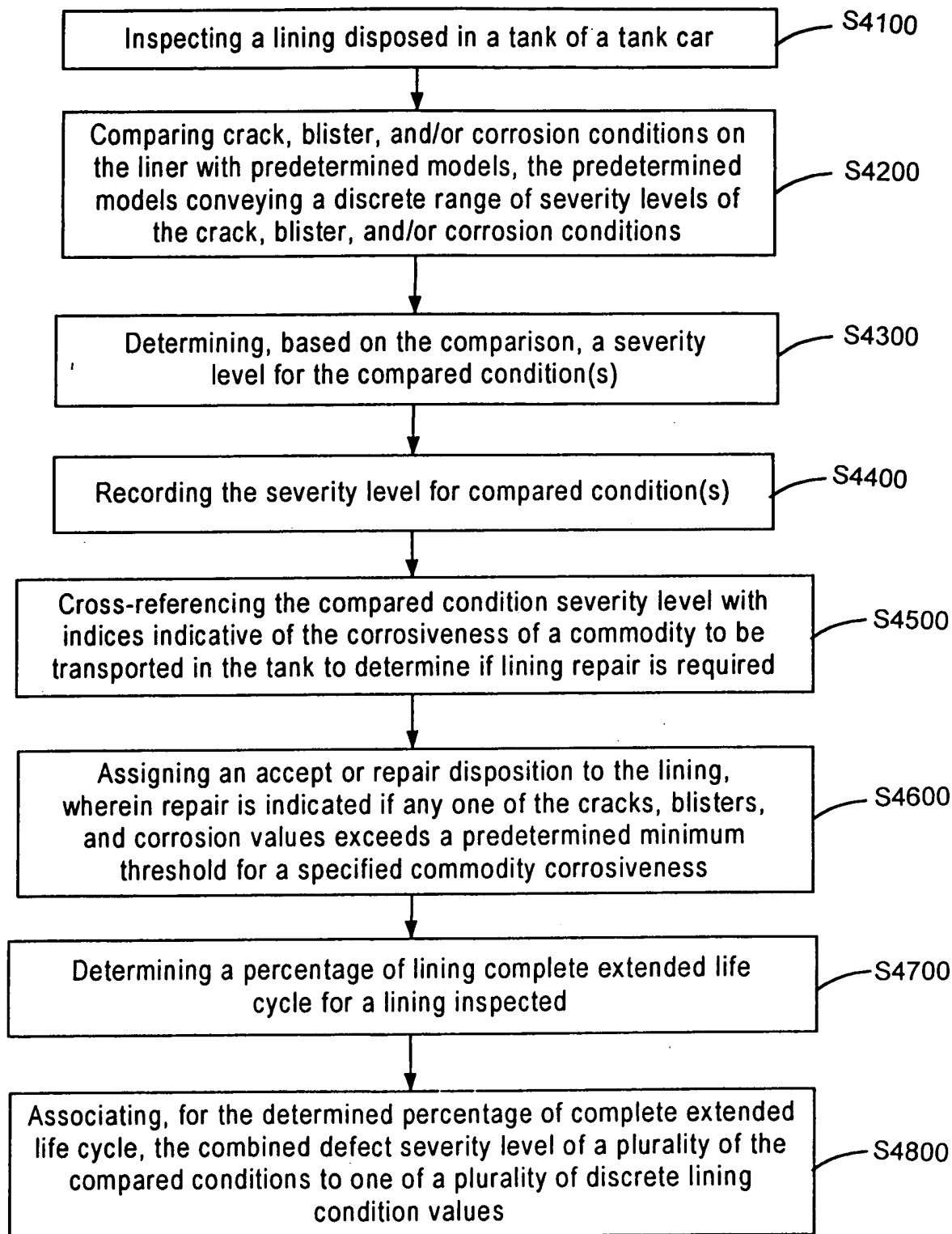


FIG. 17



FIG. 18A

TABLE 1: Accept/Repair Disposition

Defect	Condition	P.P	Commodity Corrosiveness			
			6	4	3	2
Cracks	8	R	R	A	A	A
	6	R	R	R	A	A
	4	R	R	R	R	R
Blisters	8	R	A	A	A	A
	6	R	A	A	A	A
	4	R	R	A	A	A
	2	R	R	R	R	A
Corrosion	RE1	R	R	R	A	A
	RE2	R	R	R	A	A
	RE3	R	R	R	A	A

R = Repair disposition
A = Accept as is disposition

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FIG. 18B Lining System Operating Characteristics

Lining System	approx. dft	Properties	Recommended Service	Failure Criteria	Estimated Life
(Unmodified) High Bake Phenolic (400°F)	8 to 10 mils in multiple coats	Very good Water Resistance Good Corrosion Resistance High Temperature Resistant Difficult to repair or to touch-up	Organic and Inorganic Acids (concentrated and diluted) Less suitable for strong Alkalis Resistant against most Solvents Can be used for Food Grade Chemicals	Cracking due to mechanical impact (direct or reverse), temperature cycling or vibration. Hydrogen grooving of steel under coating in highly concentrated sulfuric acid.	8 years
(Modified) High Bake Phenolic (400°F)	8 to 10 mils in multiple coats	Very good Water Resistance Good Corrosion Resistance Less brittle than unmodified phenolics	Diluted Organic and Inorganic Acids Good resistance against strong Alkalis Can be used for Food Grade Chemicals Resistant to most Solvents	Cracking due to mechanical impact (direct or reverse), temperature cycling or vibration.	8 years
(Modified) High Bake Epoxy/Amine (400°F)	12 to 15 mils in 2 coats	Very good Water Resistance Good Corrosion Resistance Two-pack materials	Diluted Organic and Inorganic Acids Very good resistance against hot alkalis Good Solvent Resistance	Becomes brittle on aging. May blister in unsuitable chemicals. May crack under impact and bending.	7 years
(Modified) Low Bake Epoxy/Amine (250°F)	12 to 15 mils in 2 coats	Good Water Resistance Good Corrosion Resistance Two-pack materials	Diluted, non oxidizing Inorganic Acids Very good resistance against hot alkalis Good Solvent Resistance	Becomes brittle on aging. May blister and/or soften in certain chemicals. May crack under impact and bending.	7 years
Epoxy/Phenolic/Amine air-dry or force curing	12 to 15 mils	Good Water Resistance Good Corrosion Resistance Two-pack materials	Acidity not lower than pH 2 Very good Alkali Resistance Good Solvent Resistance	Becomes brittle on aging, May blister and/or soften in certain chemicals. May crack under impact and bending	7 years
Epoxy/Amine Solvent Free. Air dry or Force Curing (*)	12 to 15 mils in 1 coat	Good Water Resistance Good Corrosion Resistance Plural Component Appl.	Diluted, non oxidizing Inorganic Acids Very good resistance against Alkalis Good Solvent Resistance	Becomes slightly brittle with aging. May slightly soften in certain solvents. Better Crack and Impact Resistant	8 years
Epoxy/Polyamidoamine Force curing	10 - 14 mils 2 coats	Good Water Resistance Good Corrosion Resistance Two-pack materials	Good resistance against diluted alkalis Resistant against some solvents Can be Food Grade Compliant	Becomes slightly brittle with aging. May blister or soften in certain solvents Fair Crack and Impact Resistant.	6 years
Rubber Sheet Lining	N/A	Application using in-situ vulcanizing and adhesives.	Good Acid and Alkali Resistance Not suitable for most Solvents Maximum Temperature 150°F Hard rubber better resistant than soft rubber	Oxidizing chemicals may attack the sheet lining and embrittle. Sheets may loose adhesion. Welds may deteriorate (corrosion)	12 years

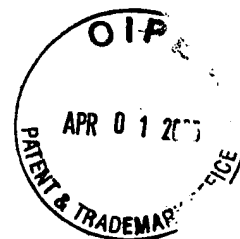


FIG. 19

TABLE 2: Lining Condition Matrix

Complete Extended Life Cycle	Defect Type	Lining Condition			
		Excellent A	Good B	Fair C	Poor D
0 - 25%	Crack Blister Corrosion DFT Stains	No Defects No Defects No Defects > 8 mils No Spots	No Defects > No. 8(2.5%) No Defects > 7 mils No Spots	> No. 8 > No. 6(15%) > Re 1 > 6 mils < 10 Sq. Ft	> No. 6 > No. 6(45%) > Re 2 < 6 mils > 10 Sq. Ft
26 - 42%	Crack Blister Corrosion DFT Stains	No Defects No. 6(2.5%) No Defects > 7 mils No Spots	No Defects > No. 6(15%) No Defects > 7 mils No Spots	> No. 8 > No. 4(45%) > Re 2 > 6 mils < 20 Sq. Ft	> No. 6 > No. 2(15%) > Re 2 < 6 mils > 20 Sq. Ft
43 - 58%	Crack Blister Corrosion DFT Stains	No Defects > No. 6(2.5%) No Defects > 6 mils No Spots	No Defects > No. 6(15%) No Defects > 5 mils < 10 Sq. Ft	> No. 8 > No. 4(15%) < Re 2 < 5 mils < 20 Sq. Ft	> No. 4 > No. 4(15%) < Re 2 < 5 mils > 20 Sq. Ft
59 - 83%	Crack Blister Corrosion DFT Stains	No Defects No. 6(15%) No Defects > 5 mils < 10 sq. Ft	No Defects > No. 4(15%) No Defects > 5 mils < 10 Sq. Ft	> No. 6 > No. 2(15%) < Re 2 > 5 mils < 20 Sq. Ft	> No. 4 > No. 2(45%) < Re 2 < 5 mils > 20 Sq. Ft
> 83%	Crack Blister Corrosion DFT Stains	No Defects No. 4(15%) No Defects > 5 mils < 10 sq. Ft	No Defects > No. 4(15%) No Defects > 5 mils < 10 Sq. Ft	> No. 4 > No. 4(15%) < Re 2 > 5 mils < 20 Sq. Ft	> No. 4 > No. 4(15%) < Re 3 < 5 mils > 20 Sq. Ft

3710

FIG. 20

Work Instruction:	Sketch/Description:
<p>1. Blistering</p> <p>A phenomenon peculiar to painted surfaces is the formation of blisters relative to some system weakness. This procedure describes the procedure for determining the size and density of the blisters so that comparisons can be made.</p> <p>Procedure</p> <p>Inspect the lining surface for evidence of blistering. Match the visual standards with the actual condition of the lining to determine the size and frequency of the blistering.</p> <p>Size - There are 5 degrees of size on a numerical scale.</p> <p>Number 10 - no blistering</p> <p>Number 8 - smallest blister easily seen by eye</p> <p>Number 6 - Small blistering</p> <p>Number 4 - Medium blistering</p> <p>Number 2 - Large blistering</p> <p>Frequency - There are 3 degrees of frequency for each category of size which describe the density of the number of blisters formed in a local area</p> <p>Code MD - Medium Dense</p> <p>Code M - Medium</p> <p>Code F - Few</p> <p>Reporting:</p> <p>Record the size of the largest area of damage. This will be a No. code.</p> <p>Record the density of the largest area of damage. This will be a letter code.</p> <p>Indicate whether the Blistering is scattered or localized</p> <p>If it is localized indicate the number of areas</p>	<p>3870</p> <p>2,5% BLISTERS COVER TOTAL AREA FEW</p> <p>15% BLISTERS COVER TOTAL AREA MEDIUM</p> <p>45% BLISTERS COVER TOTAL AREA MEDIUM DENSE</p> <p>3860</p> <p>3850</p> <p>3810</p> <p>3820</p> <p>3830</p> <p>3840</p> <p>Blister size No 8 Blister size No 6 Blister size No 4 Blister size No 2</p> <p>3800</p>





FIG. 21

Work Instruction:	Sketch/Description:
<p>2. Cracking</p> <p>Cracking is a condition that occurs when there is a break in the film surface that extends to the substrate. Where this is difficult to determine the break should be evaluated with a minimum of 10X magnification and only be called a crack if the underlying surface is visible.</p> <p>Procedure</p> <p>Visually compare the surface with the photographic reference standards to determine the size and density of the cracking.</p> <p>Three categories of cracking:</p> <p>Code I- Irregular Pattern Type - Cracking, in which the breaks in the film are in no definite pattern.</p> <p>Code L- Line Type - Cracking in which the breaks in the film are generally arranged in parallel lines, usually horizontally or vertically over the surface.</p> <p>Code S- Sigmoid Type - Cracking in which the breaks in the film form a pattern consisting of curves meeting and intersecting usually on a large scale. See adjacent Visual Standards</p> <p>Since the type and degree of failure may vary over any given area, a representative portion should be rated.</p> <p>Reporting: Record the combination size and density of the largest area of damage. This will be a No. Code.</p> <p>Record the type of cracking. This will be a letter code.</p> <p>Indicate whether the cracking is scattered or localized</p> <p>If it is localized indicate the number of areas</p>	<div data-bbox="365 535 885 955"> <p>No. 8</p> </div> <div data-bbox="365 115 885 525"> <p>No. 6</p> </div> <div data-bbox="901 535 1421 955"> <p>No. 4</p> </div> <div data-bbox="901 115 1421 525"> <p>No. 2</p> </div>

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FIG. 22



Work Instruction:	Sketch/Description:
<p>3. Corrosion</p> <p>This test method covers the evaluation of the degree of rusting on painted steel surfaces using visual standards. The amount of rusting beneath or through a paint film is a significant factor in determining whether a coating system should be repaired or replaced.</p> <p><u>Procedure</u></p> <p>Visually compare the surface with the photographic reference standards to determine the scale of degree of rusting.</p> <p>Corrosion may be scattered or localized</p> <p>Be careful not to confuse dirt or staining from rust with actual rusting.</p> <p>Re 1 - smallest corrosion easily seen by eye</p> <p>Re 2 - small amounts of corrosion</p> <p>Re 3 - Medium amounts of corrosion</p> <p>Re 4 - large amounts of corrosion</p> <p><u>Reporting:</u></p> <p>Record the combination scale of degree of rusting and the density of the largest area of damage. This will be a Re code.</p> <p>Indicate whether the rusting is scattered or localized</p> <p>If it is localized indicate the number of areas</p>	<p>4000</p> <p>4010</p> <p>4020</p> <p>4030</p> <p>4040</p> <p>Scattered</p> <p>Localized</p> <p>Re 1</p> <p>Re 2</p> <p>Re 3</p> <p>Re 4</p> <p>A</p> <p>B</p> <p>C</p> <p>D</p> <p>0.05%</p> <p>0.5%</p> <p>1%</p> <p>3%</p>

REPLACEMENT SHEETS

Filing Date: September 29, 2000

U.S. Patent Application No. 09/672,793

Title: Method and Arrangement for Inspection and Requalification of...

Patent Agent: Stephen T. Scherrer (Reg. No. 45,080)

Tel: 312.372.2000 Fax: 312.984.7700

Docket No. 47440-015 (p.k.a. 47440-027)

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FIG. 23

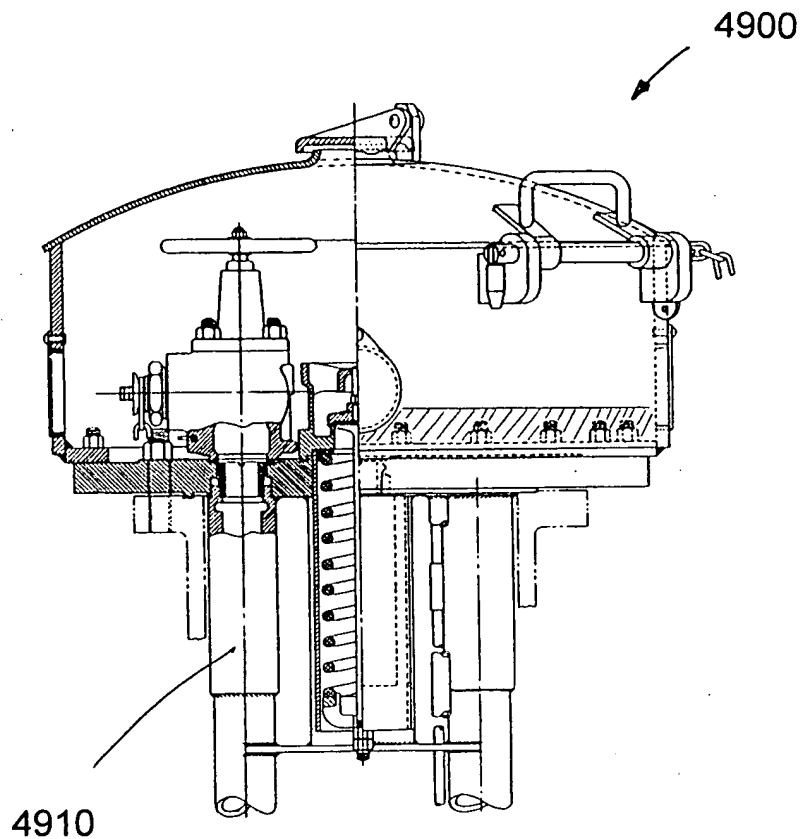




FIG. 24A

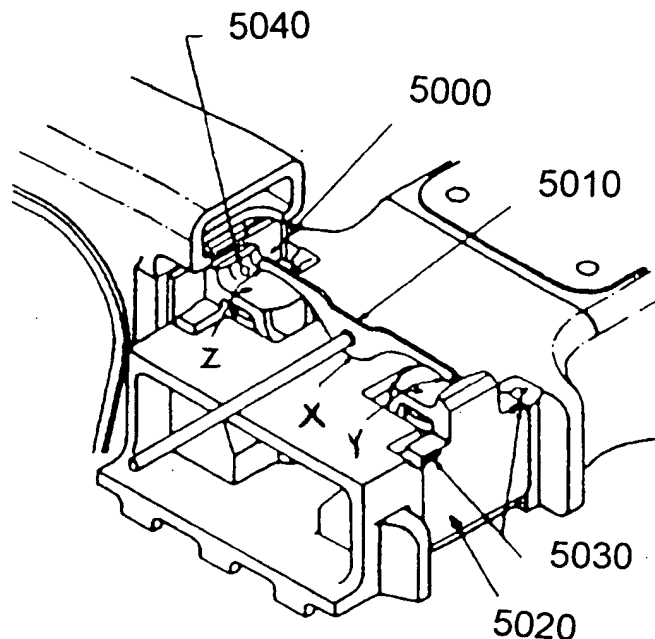


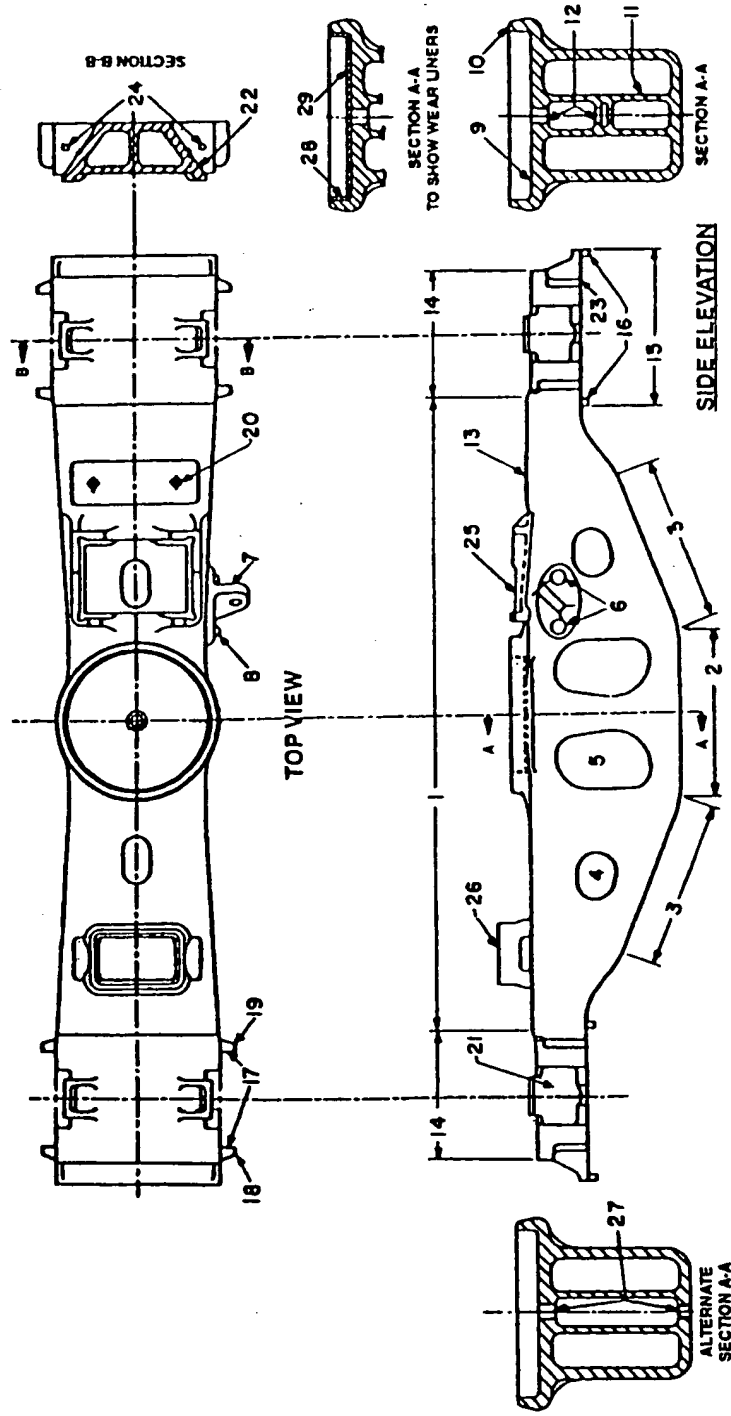
FIG. 24B

Type of Truck	Repair When Total Clearance Between Bolster and Truck Side Frame Columns Reaches:		Repair to These Nominal Clearance Dimensions Between Bolster and Truck Side Frame:		
	Lateral (inches)	Longitudinal (inches)	Lateral		Total Longitudinal (inches)
			Inside (inches)	Outside (inches)	
Trucks WITH built-in snubbing features having roller bearings which provide lateral (all bearing sizes); or having 5" x 9" or 5 1/2" x 10" roller bearings which provide no bearing lateral.	1 1/8"	*	1/4"	1/4"	*
Trucks with built-in snubbing features having 6" x 11", 6 1/2" x 12" or 7" x 12" roller bearings which provide no bearing lateral.	1 1/2"	*	1/2" **	1/2" **	*

* Longitudinal clearances are primarily a matter of wear of frame or bolster column wear plates, friction shoes and bolster or frame column surfaces. See maintenance instructions from truck designer of manufacturer.

** 1/4" and 5/8" clearances are acceptable on bolsters manufactured prior to 1987.

FIG. 24C



- | | | | |
|--------------------------------------|---------------------------------|---|--|
| 1. Top or Compression Member | 9. Center Plate Bearing Surface | 17. Columns | 25. C-Pep Pocket |
| 2. Bottom Center Member | 10. Center Plate Rim | 18. Outer Column Guides-Gibs | 26. Side Bearing Pocket |
| 3. Diagonal Tension Member | 11. Center Post | 19. Inner Column Guides-Gibs | 27. Locking Center Pin Opening |
| 4. Sidewall Lightener Holes | 12. King Pin Well | 20. Side Bearing Rivet or Bolt Holes | 28. Center Plate Vertical Ring Wear Line |
| 5. Brake Rod Holes | 13. Side Bearing Pads | 21. Friction Wedge Pockets | 29. Center Plate Horizontal Wear Liner |
| 6. Dead Lever Lug Retainer Holes | 14. Ends | 22. Friction Wedge Bearing Surfaces | |
| 7. Dead Lever Lug (Right Hand) Shown | 15. Spring Seats | 23. Spring Seats | |
| 8. Dead Lever Lug Rivets or Bolts | 16. Spring Seat Lugs | 24. Friction Wedge Retaining Pin Openings | |



FIG. 24D

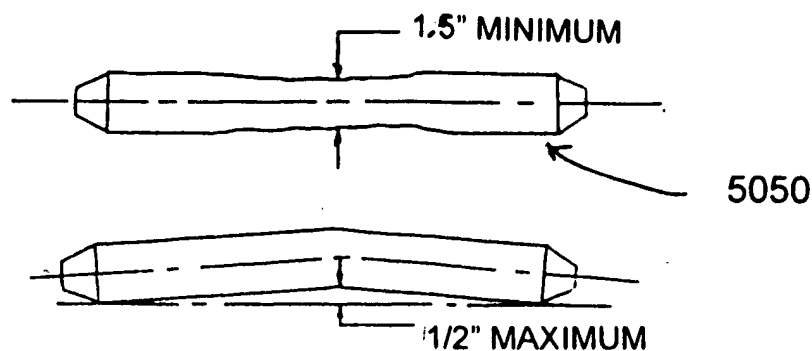


FIG. 24E

<u>Bettendorf</u>	<u>Buckeye</u>	<u>ASF</u>	<u>Pittsburgh Steel</u> <u>Foundry</u>	<u>Scullin Steel</u>		
UT456	3-1776	7273	3-1673	4665	5364	5869-B
<u>Dresser</u>	F-420	7323	3-1674	4770	5364-C	5917-A
TF5105	F-535	21182	4-1862	4891	5364-E	6260-C
<u>Dominion</u>		21362	4-2045	4942	5413-B	6260-D
TF-5100			12897	5171	5483-A	6428-A
<u>Canadian Steel</u>			12921	5220	5483-B	6577-A
<u>Foundry</u>			21263	5321-A	5600-A	6656
26565				5321-B	5600-B	6673-A
				5321-C	5600-C	7207
				5321-F	5811-A	42-CS-180
				5321-H	5869-A	



FIG. 24F

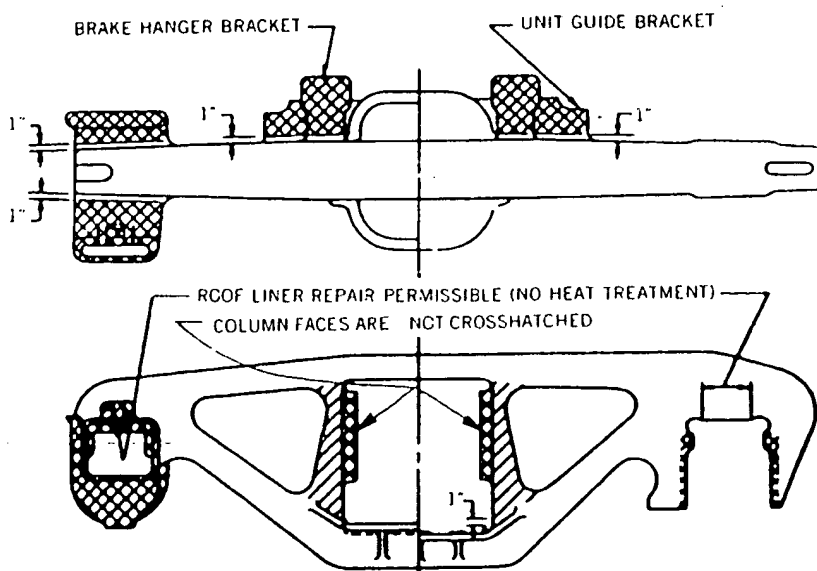
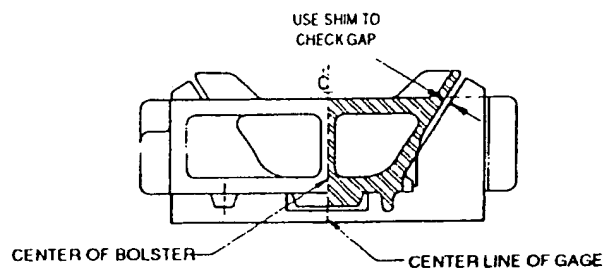
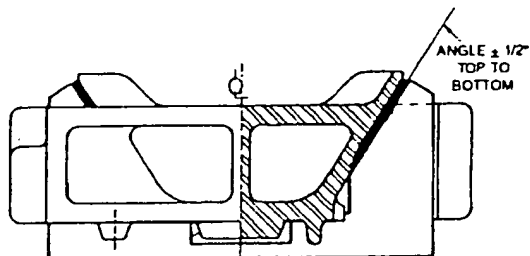


FIG. 24G



GAGE IN WORN BOLSTER POCKET



GAGE IN REPAIRED BOLSTER POCKET

REPLACEMENT SHEETS
 Filing Date: September 29, 2000
 U.S. Patent Application No. 09/672,793
 Title: Method and Arrangement for Inspection and Requalification of...
 Patent Agent: Stephen T. Scherrer (Reg. No. 45,080)
 Tel: 312.372.2000 Fax: 312.984.7700
 Docket No. 47440-015 (p.k.a. 47440-027)
 Sheet 79 of 86

FIG. 24H

AAR Designation	Load Carrying Spring Condemning Free Height
D3	8 5/8"
D4	9 1/16"
D5	9 5/8"
D6	9 5/16"
D6A	8 3/8"
D7	10"





FIG. 25A

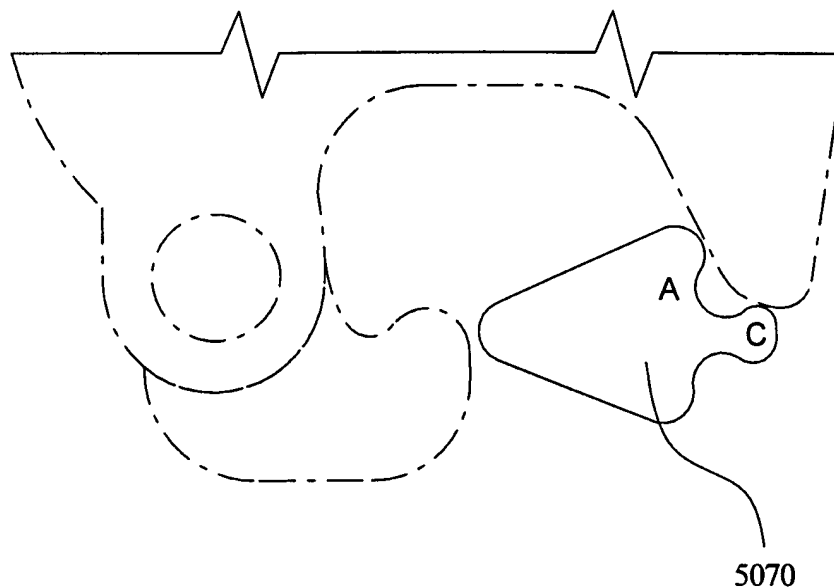


FIG. 25B

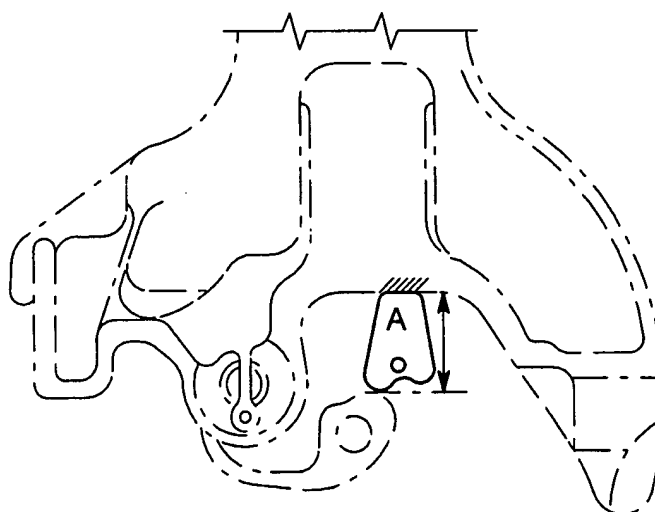


FIG. 25C

FIGURE C-1

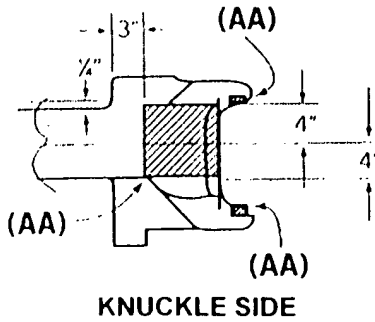


FIGURE C-2

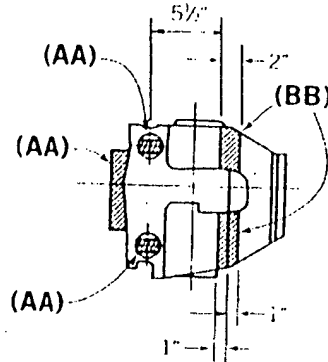
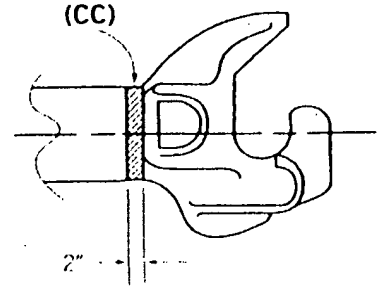


FIGURE C-3



F-TYPE COUPLERS

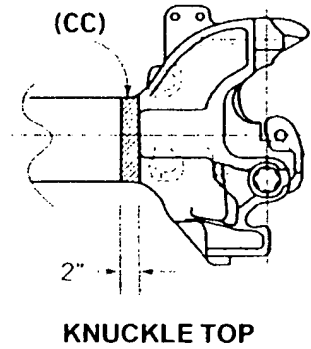
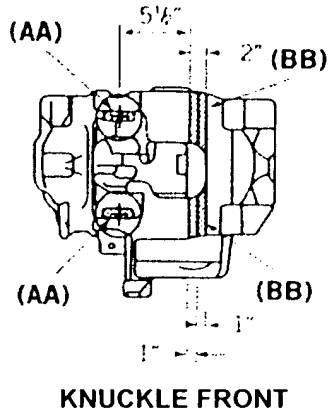




FIG. 25D

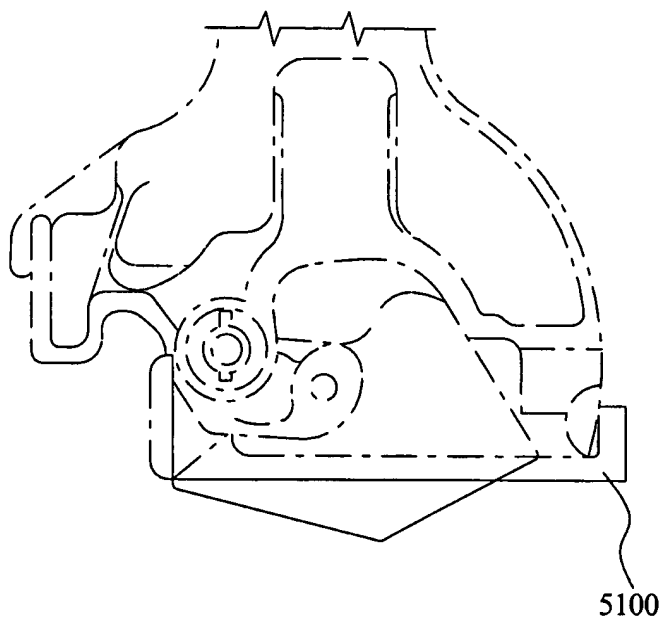


FIG. 25E

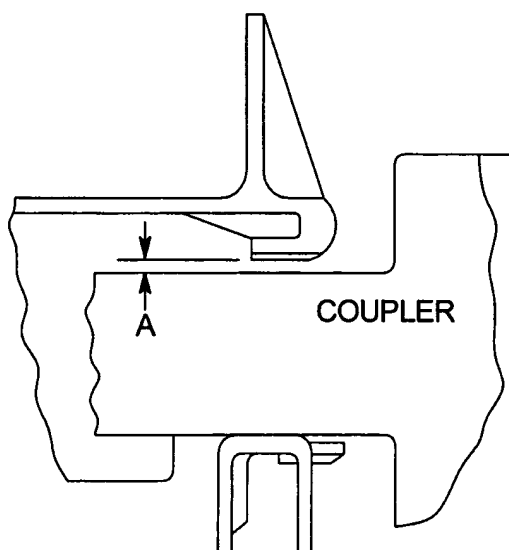




FIG. 25F

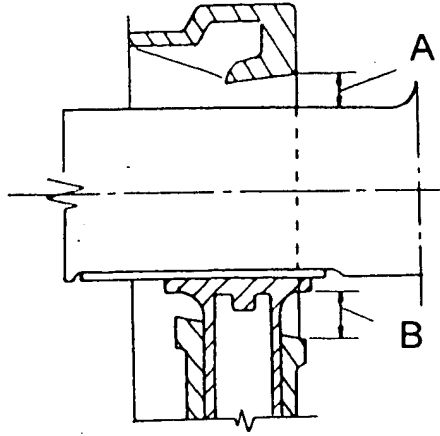


FIG. 25G

Coupler Type	Min. Clearance Top of Shank to Striker Dimension "A" (inches)	Min. Clearance Spring Basket Top to Underside of Carrier Lip. Dimension "B" (inches)
F70, F71, F72, SF70 29 1/4" Length	1 1/8"	1 5/8"
F79, SF79 43" Length	2 3/8"	3 1/2"

FIG. 25H

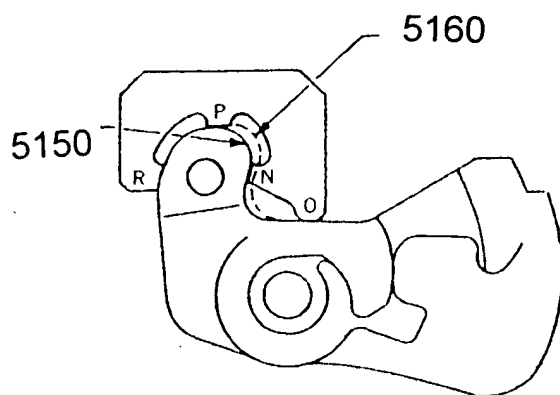


FIG. 25I

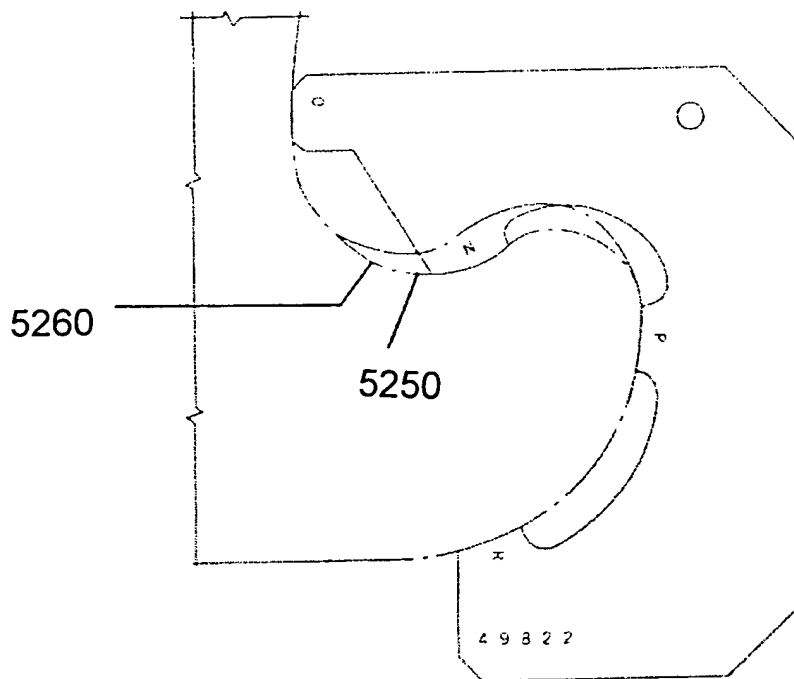




FIG. 25J

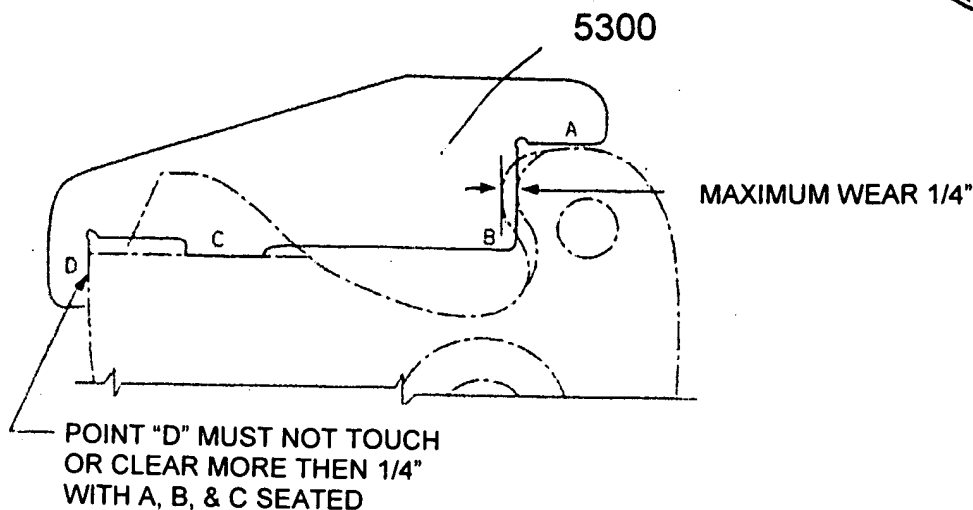
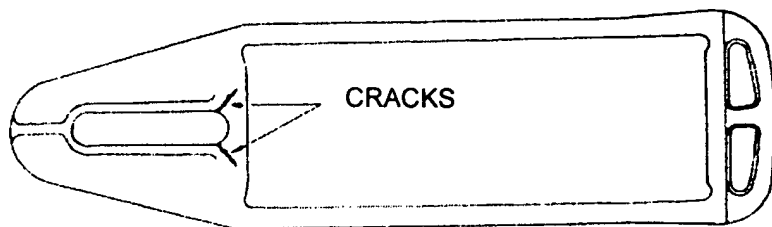


FIG. 25K

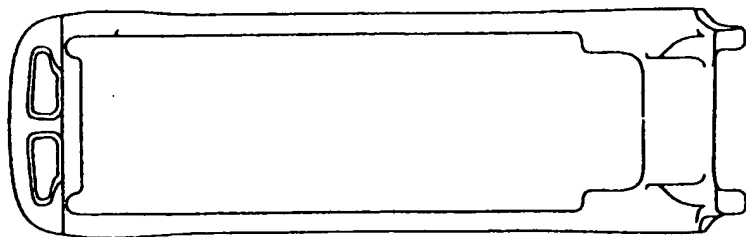


Y40, SY40, OR YS93 DESIGN YOKES

FOR USE WITH TYPE E COUPLER

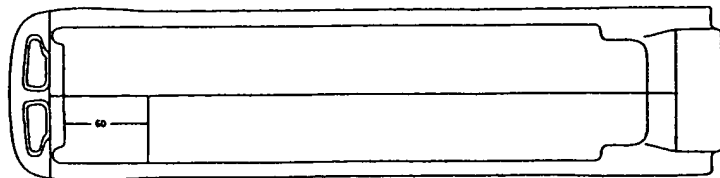
Y41 DESIGN YOKES

FOR USE WITH TYPE E COUPLER



Y45 DESIGN YOKES

FOR USE WITH TYPE E/F AND F COUPLERS



Y49 DESIGN YOKES

FOR USE WITH TYPE E/F AND F COUPLERS



FIG. 26A

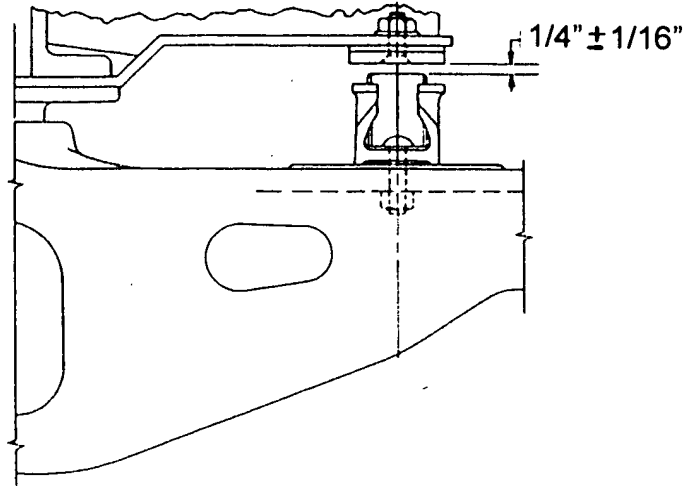


FIG. 26B

